

Colour Television

Service Manual

CB5149

CB5949

Model C21EF25NB
C25EG25NB

(U.K)

Service C21EF25NB-00
Ref. No. C21EG25NB-00

PRODUCT CODE

1113 19402 (C21EF25NB)

1113 20502 (C25EG25NB)

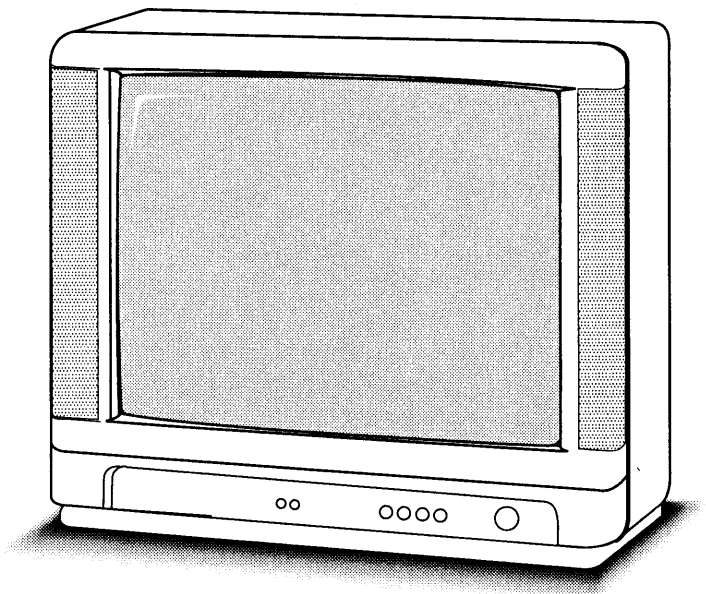
ORIGINAL VERSION

Chassis No. EB2-A

Give complete "SERVICE REF. NO." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.

Note

This TV receiver will not work properly in foreign countries where the television transmission system and power source differ from the design specifications. Refer to the specifications for the design specifications



SPECIFICATIONS

Power source	AC 220~240V 50Hz
Television system	System I
Colour system	PAL
Receiving channel	UHF 21~69
Aerial input impedance	75ohm
AV terminal	
21 Pin socket	CENELEC standard
Sound output	8.5 watts X2
C21EF25N	
Picture tube	55cm diagonal, 90 degree
(Visible picture diagonal)	51cm
Dimensions (WxHxD)	596 x 465.5 x 483 mm
Weight	22 Kg
C25EG25N	
Picture tube	63cm diagonal, 110 degree
(Visible picture diagonal)	59cm
Dimensions (WxHxD)	680 x 535.5 x 449.5 mm
Weight	27 Kg

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SAFETY PRECAUTION

- 1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
- 3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc.

Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

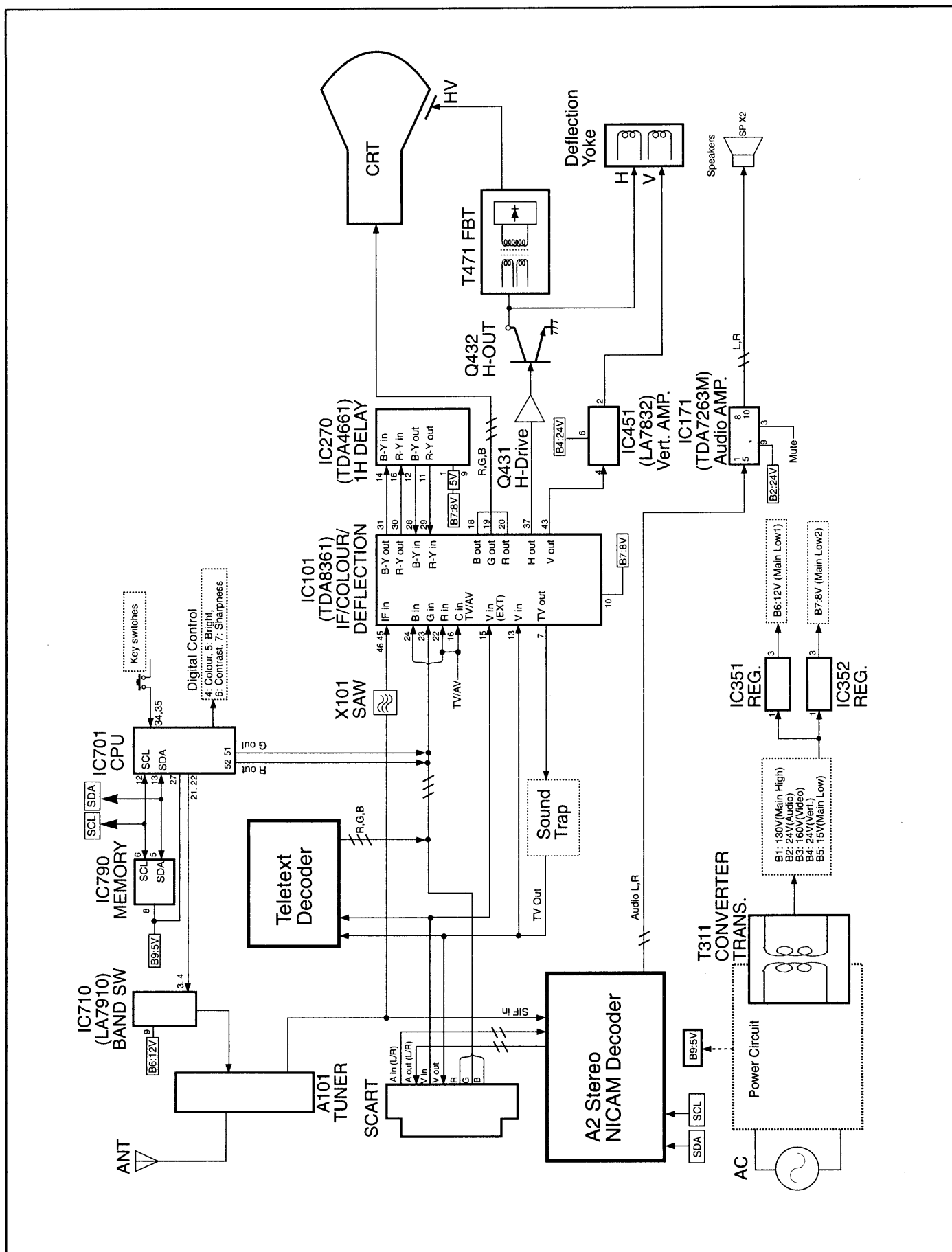
The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage adjustment to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark ⚠. No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark ⚠.

BLOCK DIAGRAM

This is a diagram for all models and therefore differs slightly from the actual block diagram.



CIRCUIT DESCRIPTION

1. POWER SUPPLY

The power supply circuit of the EB2-A chassis is switched mode power supply with a primary side comprising of a bridge rectifier and smoothing circuit, oscillator circuit, and control circuit. The secondary circuit comprises half wave rectifiers and smoothing with voltage regulators for the 8V and 12V suppliers. The AC input voltage is full-wave rectified by the rectifier smoothing circuit, and an unstable DC voltage is generated at both terminals of the smoothing capacitor C307. This voltage is input to the oscillation circuit. The oscillation circuit is provided with a blocking oscillator circuit that switches the switching transistor Q313 ON and OFF, and an oscillation frequency and a duty square wave pulse are generated in the input windings according to operation of the control circuit. A square-wave pulse whose size is dependent on the turn ratio of the input and output windings is obtained in the output winding. This is rectified in the output rectifier circuit, and the desired DC voltage is obtained.

2. VIF & DEFLECTION (TDA8361)

The IF output signal from the tuner passes through the SAW filter, which segregates the VIF signal, and it is input to pin45 and pin46 of IC101. The signal input to the IC passes through the IF amplifier, video detection and video amplifier circuits and is output from pin7 as a composite video signal. And after this signal is converted to impedance at Q122, supplies to the video and chroma amplifier stages.

The sync.-separation circuit separates the video signals applied to pin13(internal video signal) or pin15(external video signal) to vertical- and horizontal-sync. signals respectively. The horizontal oscillator requires no external components and is fully integrated. The oscillator is always running when the start-pin36 is supplied with 8V. Horizontal drive signal is output from pin37. VR401 is for adjustment of the horizontal centring. The separated vertical-sync. signal from sync. separation circuit passes through the vertical-separation circuit, and applied to trigger divider circuit. The horizontal oscillation pulse and input vertical sync. pulse are monitored by the trigger divider circuit, and switching 50Hz and 60Hz system, the vertical amplitude automatically adjusted for 50Hz and 60Hz. The output signal from the trigger divider is triggered vertical oscillation circuit consisting of C401, R402 and pin42, and vertical drive pulse is output from pin43. VR451 is for changing the amount of AC feedback applied to pin41 and for adjustment of the vertical amplitude.

3. SIF & NICAM (TDA8204, TDA8205)

The IF signal from the tuner is also supplied to the NICAM & MONO unit on pin 5 of socket KA. On the NICAM & MONO panel the IF signal is fed into the detector IC, IC2901, via the saw filter. The SIF is detected, and the detected signal is fed to pin 7 IC2902 for processing.

4. VIDEO CHROMA & R.G.B. (TDA8361)

The composite video signal output from the pin7 of IC101 passes through Q122/Q124, and it is supplied to pin13. The external video signal output from SCART is supplied to pin15. The video signal input to pin13 or pin15 is separated to luminance (Y) signal and chroma signal in IC101. These pins are used in common with H/V-sync. separation input. The peaking of Y signal is adjusted by DC voltage of pin14. ("SHARPNESS" control) The chroma signal is divided into R-Y and B-Y chroma signals, demodulated in IC101, and output from pin30 (R-Y) and pin31 (B-Y). These chroma signals pass through the 1H delay line circuit (IC270), and they are input to pin29 (R-Y) and pin28 (B-Y). These R-Y/B-Y signals pass through RGB matrix circuit and RGB selector circuit of IC101. The internal RGB signals are generated in RGB matrix circuit and the RGB selector, consisting linear amplifiers, clamps and selects either the internal RGB signals or the external RGB signals input from pin22(R), pin23(G), pin24(B). Selection is controlled by the voltage at the RGB switch control (pin21) and mixed RGB modes are possible since RGB switching is fast. The RGB switch also functions as a fast blanking pin by blanking the RGB output stages; here internal and external RGB signals are overruled. The colour gain is controlled by DC voltage of pin26. ("COLOUR" control) The contrast control voltage present at pin25, and the brightness control voltage present at pin17 controls DC level of RGB signals. The RGB signals are finally buffered before being available at the RGB output pins [pin20 (R), pin19 (G), pin18 (R)].

5. TONE & VOLUME (TDA8424)

The left and right audio information from pins 27 (ADLI) and 28 (ADRI) of IC2902, respectively, and into pins 1 and 3 of IC2904, on the NICAM & MONO unit. Within this IC the volume, treble, and bass parameters are adjusted via I²C control. The left and right audio signals are output from pins 11 and 13.

6. AUDIO OUTPUT(TDA7263M)

The audio signals output from the audio unit are input to pin1(L) and 5(R) of IC171 and passes through the pre-

amplifier circuit and drive circuit, after which it is input to the audio amplifier. The audio amplifier is an SEPP (single-ended, push-pull) OTL type and output to pin8(R) and 10(L) to directly drive the speakers.

7.VERTICAL OUTPUT (LA7832)

An IC (LA7832) is used for the vertical output circuit in this chassis. The vertical drive pulse from pin43 of IC101 is input to pin4 of IC451. This pulse drives IC451, and vertical scanning is performed. In the first half of scanning a deflecting current is output from pin2 and passes through the following path:

Vcc(B4) → D451 → pin3 → pin2 → DY → C461 → VR451/R459. An electric charge is then stored in C461. In the last half of scanning the current path is C461 → DY → pin2 → pin1 → VR451/R459 → C461. In this way, an amplifying sawtooth waveform current flows directly to DY to perform electron beam deflection. Next, in the first half of the banking period the vertical drive pulse suddenly becomes OFF, and in order to reduce the current flowing to DY, the current path becomes as follows by the inductance of DY:

DY → pin2 → pin1 → VR451/R459 → C461 → DY. Also, when the charge of DY has dissipated, the current path becomes Vcc24V → pin6 → pin7 → C452 → pin3 → pin2 → DY → C461 → VR451/R459, and when the prescribed current value is reached, the vertical drive pulse becomes ON. This completes one cycle.

8.HORIZONTAL OUTPUT

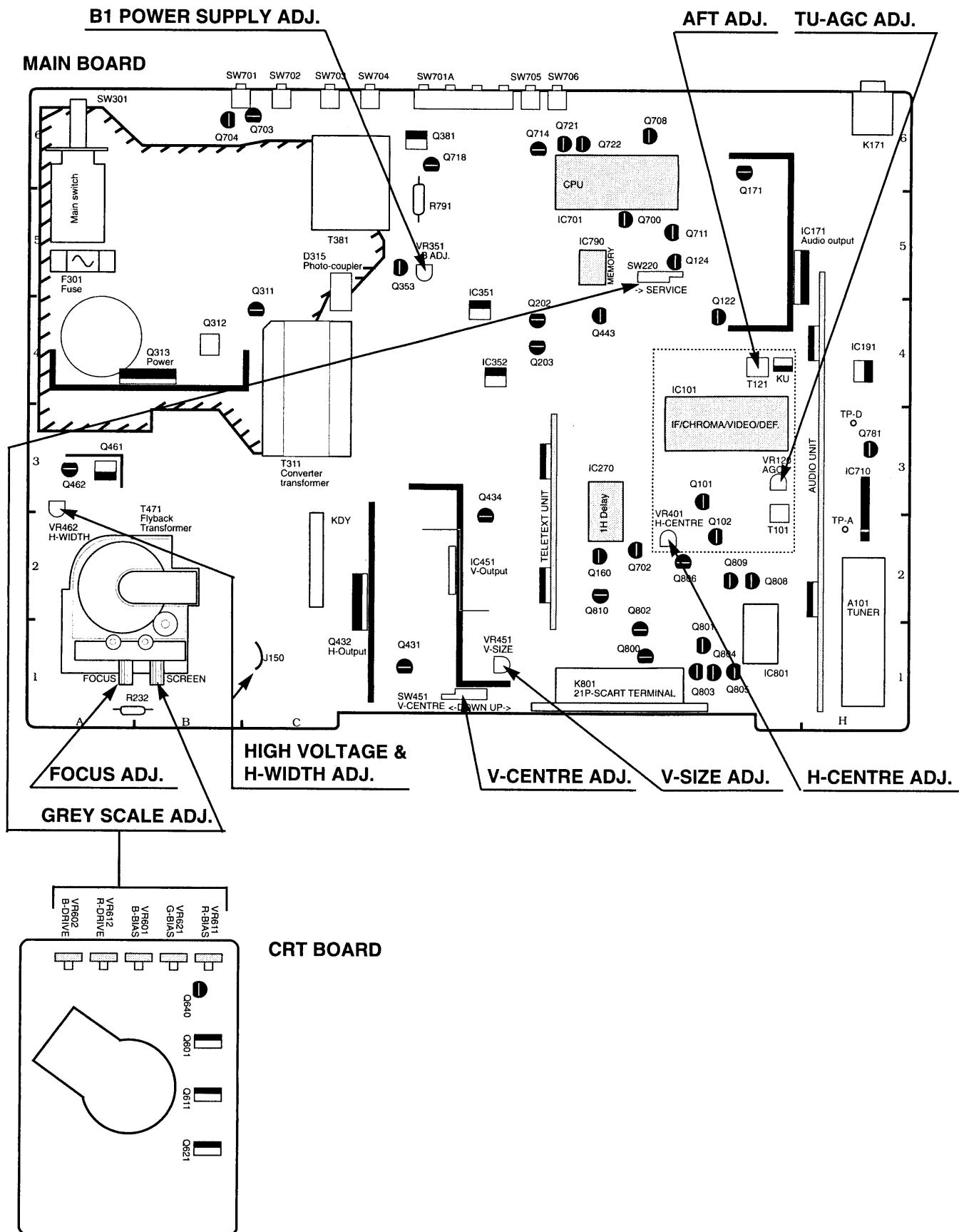
A horizontal oscillation signal is output from pin37 of IC101 and switches the drive transistor Q431. This switching signal is current amplified by the drive transformer T431 and drives the output transistor Q432. When Q432 becomes ON, an amplifying current flows directly to DY through C441/442 → DY → Q432 → GND, and deflection is performed in the last half of the scanning period. Next, when Q432 becomes OFF, the charge that had been stored in DY up to that point releases a resonance current to the resonant capacitors C420 and C427 and charges them. The current stored in C420 and C427 is then flowed back to DY, and an opposite charge is then stored in DY. This opposite charge then switches the dumper diode in Q432 ON, the resonance state is completed, and an amplifying current is then flowed again directly to DY through the dumper diode. By this means, deflection in the first half of the scanning period is performed, and when Q432 becomes ON at the end of the first half of the scanning period, deflection during the last half is begun, thus completing one cycle.

9.CPU

Pin description

- Pin1:** H-sync. input (Horizontal pulse for OSD)
- Pin2:** V-sync. input (Vertical pulse for OSD)
- Pin3:** Not used(Open)
- Pin4:** Colour control output (6-bit DAC)
- Pin5:** Brightness control output (6-bit DAC)
- Pin6:** Contrast control output (6-bit DAC)
- Pin7:** Sharpness control output(6-bit DAC)
- Pin8:** Not used (GND)
- Pin9:** TV/AV output (L:AV mode)
- Pin10:** Not used(H)
- Pin11:** Not used (GND)
- Pin12:** I²C bus SCL (Serial clock for memory)
- Pin13:** I²C bus SDA (Serial data for memory)
- Pin14:** Tuning voltage output
- Pin15:** Ident signal input (L:No signal)
- Pin16:** R/C signal input
- Pin17/18:** Band select option input
- Pin19:** Ignor output
- Pin20:** SCART auto switch input (L:VCR Play)
- Pin21/22:** Band selector output
- Pin23:** Supply Ground
- Pin24:** Oscillator input for CPU
- Pin25:** Oscillator output for CPU
- Pin26:** Supply Ground
- Pin27:** Power supply(+5V)
- Pin28:** Oscillator output for OSD
- Pin29:** Oscillator input for OSD
- Pin30:** Reset input
- Pin31:** Protect signal input (L:Power circuit defects)
- Pin32:** Not used(GND)
- Pin33:** AFT signal input
- Pin34:** Keyboard scan 2
- Pin35:** Keyboard scan 1
- Pin36:** P-ON(TEXT)
- Pin37:** S-VHS detect input(Sin:H)
- Pin38~45:** Not used (GND)
- Pin46:** Not used(GND)
- Pin47:** Mute output in no picture(FTZ mute)
- Pin48:** Power ON/OFF output (H:ON)
- Pin49:** Blanking output for OSD
- Pin50:** Not used (Open)
- Pin51:** Green output for OSD
- Pin52:** Red output for OSD

SERVICE CONTROL ADJUSTMENT



B1 POWER SUPPLY ADJUSTMENT

1. Set VR351 to be mechanical centre before pressing the main switch.
2. Tune the receiver to PAL circular pattern.
3. Set brightness and contrast controls to normal.
4. Connect digital V-meter to R791 (VR351 side).
5. By using VR351, adjust voltage to 130 ± 0.5 V (**for 21 inch**).
By using VR351, adjust voltage to 150 ± 0.5 V (**for 25 inch**).

AFT ADJUSTMENT

1. Tune the receiver to the clearest station.
2. By using T121, adjust AFT to obtain the best picture.

AGC ADJUSTMENT

NOTE: Do not attempt this adjustment with weak signal.

1. Tune the receiver to the clearest station.
2. Set AGC VR (VR120) in direction which causes snow noise to appear, then in the opposite direction until snow noise just disappears.

GREY SCALE ADJUSTMENT

[SCREEN VR ADJUSTMENT]

1. Tune the receiver to the white pattern.
2. Set brightness control to display centre and contrast control to normal.
3. Set SW220 to "SERVICE" position.
4. Set VR602 and VR612 to be mechanical centre.
5. Turn VR601, VR611 and VR621 fully counter-clockwise.
6. Set screen VR for one colour to be just visible.

[BIAS VR ADJUSTMENT]

7. By using VR601, VR611 or VR621, adjust line to be white.
8. Set SW220 to "NORMAL" position.

[DRIVE VR ADJUSTMENT]

9. By using VR602 and VR612, adjust white balance.

HIGH VOLTAGE & WIDTH ADJUSTMENT

[HIGH VOLTAGE ADJUSTMENT]

1. Tune the receiver to PAL circular pattern.
2. Set brightness and contrast controls to maximum.
3. Connect digital V-meter to both terminals of R232 (left side)(+), and high voltage meter to CRT anode.
4. Confirm high voltage to be 25.0 ± 1 KV at beam current 1.0, and less than 28.0 KV at 0 beam current (**for 21 inch**).
Confirm high voltage to be 26.0 ± 1 KV at beam current 1.1, and less than 29.0 KV at 0 beam current (**for 25 inch**).

[H-WIDTH ADJUSTMENT]

5. If H-width is too wide or narrow, connect or disconnect a lead wire J150 (**for 21 inch**).
Adjust VR462 to obtain proper H- width (**for 25 inch**).
6. Reconfirm high voltage.

H-CENTRE ADJUSTMENT

1. Tune the receiver to circular pattern.
2. Adjust H-centre by using VR401.

V-CENTRE ADJUSTMENT

1. Tune the receiver to circular pattern.
2. Adjust V-centre by using SW451.

V-SIZE ADJUSTMENT

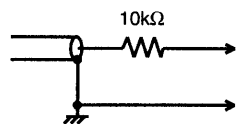
1. Tune the receiver to circular pattern.
2. Adjust V-size by using VR451.

FOCUS ADJUSTMENT

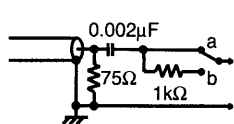
By using FOCUS VR, adjust focus control for well scanning lines.

CIRCUIT ALIGNMENT

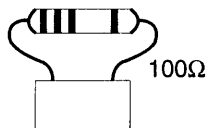
VIF ALIGNMENT



Input probe



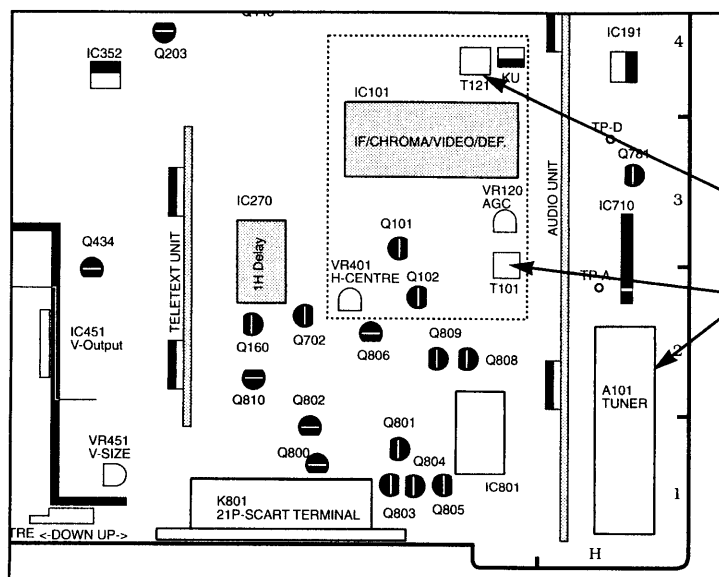
Output probe



Damping resistor

		DETECTOR ADJUSTMENT	OVERALL WAVEFORM
SETTING	DC 15V AGC voltage (4.3-4.5V) Output probe	IC351-1 IC101-48 p Tuner TP (Side b) Q124-E	IC351-1 IC101-48 p Tuner TP (Side b) Q124-E
	Input probe Band Damping R System SW Sweep ATT	No No I 25	No KU-1 & KU-2 I 25
Adjustment		By using T121, adjust "P" to be maximum amplitude.	By using Tuner converter coil and T101, make the marker positions to P=30 ± 10% C=30 ± 10%
VIF waveform			

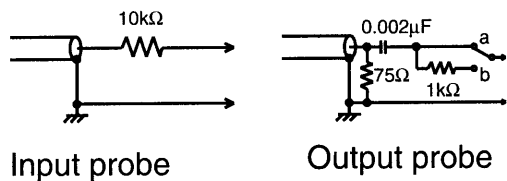
MAIN BOARD

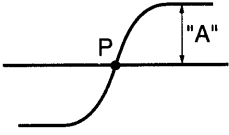
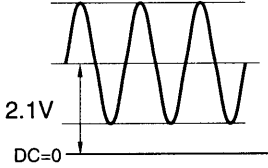


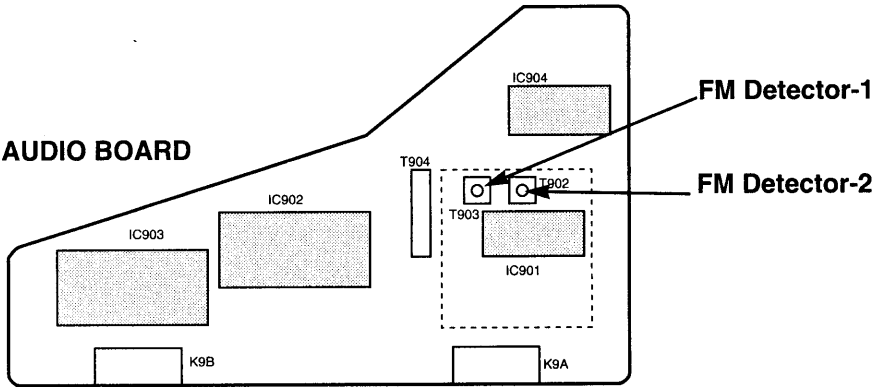
Detector adjustment

Overall waveform

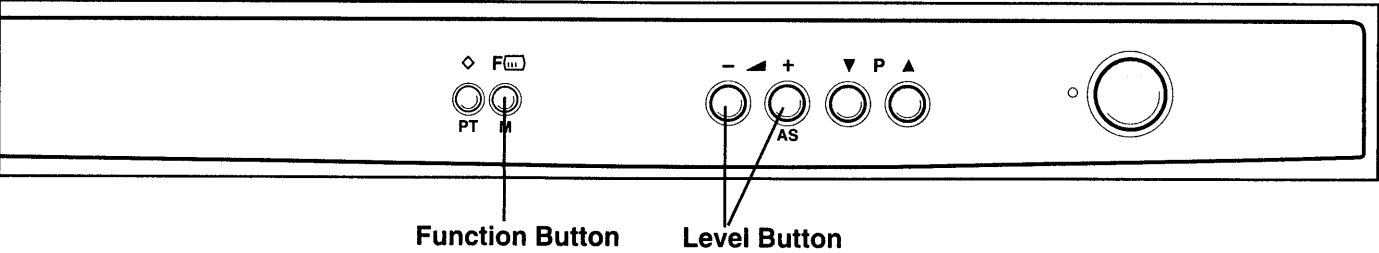
SIF ALIGNMENT



		FM DETECTOR-1	FM DETECTOR-2
SETTING	DC 5V AGC voltage Output probe Input probe Sweep ATT Marker Frequency	IC901-15pin IC901-3pin IC901-1pin (Side b) IC901-14pin 10 39.5MHz	IC901-15pin -- IC901-12pin (Side b) IC901-6pin (Condition) Carrier frequency: 6.0MHz Modulation frequency: 1kHz(sine waveform)
Adjustment		1. Adjust AGC voltage to be "A" = 0.5Vp-p. 2. By using T903, adjust "P" to be equal centre line.	By using T902, adjust DC level to be 2.1V.
VIF waveform			



MEMORY IC REPLACEMENT (Important Notice)



When you replace a memory IC (IC790), it is necessary to initialise the IC as follows.

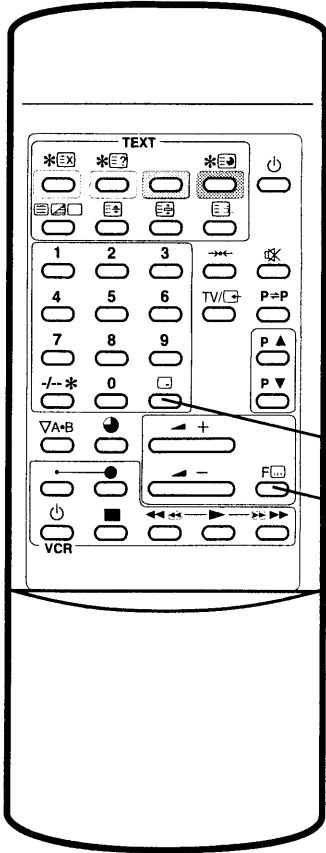
A. Initialisation of Memory IC

1. When you press and hold the Function button on the TV set and then press the Recall button on the RC transmitter, the following picture will appear on the screen.



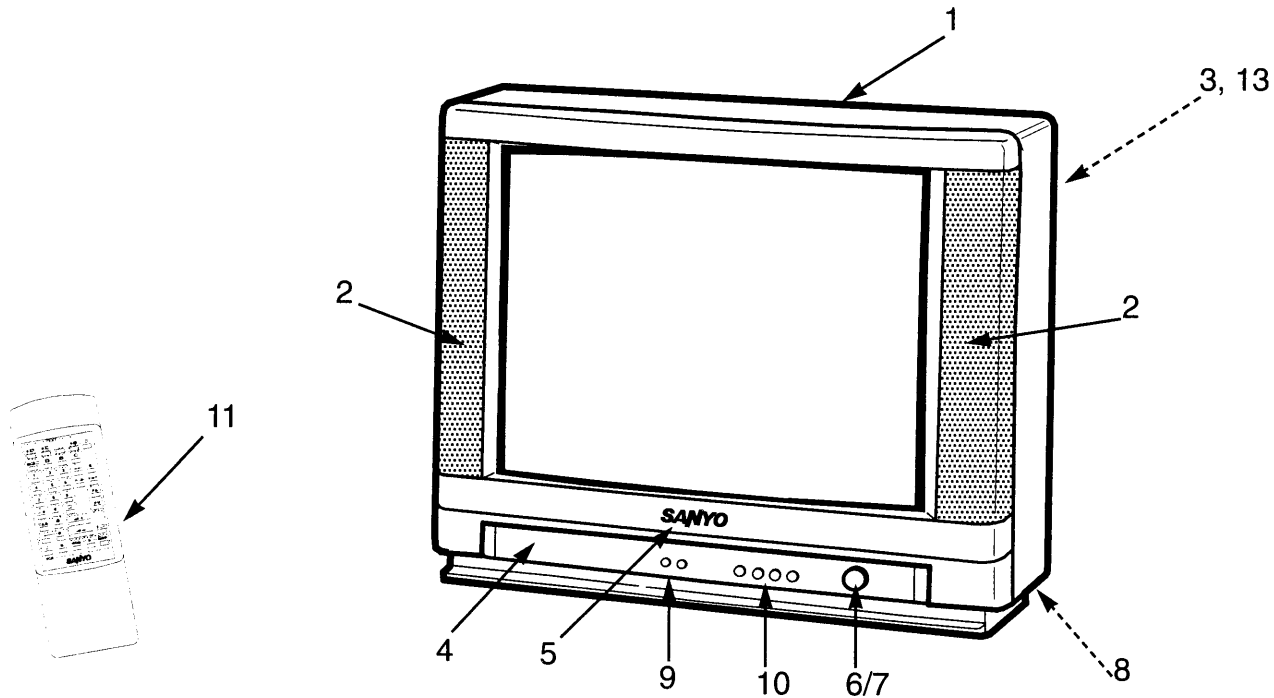
2. Confirm SET number of all items is "0" by pressing the Function button.
3. If it is not "0", change to "0" by the Level (+/-) button. (Changing the SET number, automatically memorised.)
4. Press the Recall button, to return the normal TV mode.

For more information, please refer to "special functions" on the instruction manual.



CABINET PARTS LIST

Note: Parts order must contain Service ref No., Part No. and a Description.



CB5149
SERVICE REF. NO.
C21EF25NB-00

CB5949
SERVICE REF. NO.
C25EG25NB-00

Key No.	Part No.	Description	Key No.	Part No.	Description
1.	610 249 9087	ASSY-CABINET FR - E7PC	1.	610 251 2748	ASSY-CABINET FR - E7LC
2.	610 249 9094	ASSY GRILLE SP - E7PC	2.	610 251 2755	ASSY GRILLE SP - E7LC
3.	610 249 5072	CABINET BACK - E7PC	3.	610 250 9557	CABINET BACK - E7LC
4.	610 249 9100	DEC SHEET - E7PC	4.	610 249 9100	DEC SHEET - E7PC
5.	645 003 9256	SANYO BADGE	5.	645 003 9256	SANYO BADGE
6.	610 249 5355	BUTTON POWER - E7KC	6.	610 249 5355	BUTTON POWER - E7KC
7.	610 210 7302	COIL SPRING - D8HA	7.	610 210 7302	COIL SPRING - D8HA
8.	610 102 7823	AC CORD HOLDER - D4VA	8.	610 102 7823	AC CORD HOLDER - D4VA
9.	610 248 5752	BUTTON UNIT B - E7CC	9.	610 248 5752	BUTTON UNIT B - E7CC
10.	610 249 5331	BUTTON UNIT A - E7KC	10.	610 249 5331	BUTTON UNIT A - E7KC
11.	645 003 6873	ASSY, REM CONT - JXSA	11.	645 003 6873	ASSY, REM CONT - JXSA
	610 250 0165	RC CASE TOP - JXSA		610 250 0165	RC CASE TOP - JXSA
	610 250 0172	RC CASE BOTTOM - JXSA		610 250 0172	RC CASE BOTTOM - JXSA
	610 250 0189	RC BATTERY LID - JXSA		610 250 0189	RC BATTERY LID - JXSA
	610 250 0134	DEC RC SHEET - JXSA		610 250 0134	DEC RC SHEET - JXSA
12.	610 249 9322	INST MANUAL - E7PC	12.	610 249 9322	INST MANUAL - E7PC
13.	610 249 9131	LABEL RATING - E7PC	13.	610 251 2946	LABEL RATING - E7LC

CHASSIS ELECTRICAL PARTS LIST

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a  mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

Note Parts order must contain Service Ref. No., Part No., and descriptions.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Read description in the Capacitor and Resistor as follows: CAPACITOR CERAMIC 100P K 50V _____ Rated Voltage Tolerance Symbols: <u>Less than 10PF</u> A: Not specified B: ±0.1PF C: ±0.25PF D: ±0.5PF F: ±1PF G: ±2PF R: ±0.25-0PF S: ±0-0.25PF E: +0-1PF <u>More than 10PF</u> A: Not specified B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% G: ±2% H: ±3% J: ±5% K: ±10% L: ±15% M: ±20% N: ±30% P: +100-0% Q: +30-10% T: +50-10% U: +75-10% V: +20-10% W: +100-10% X: +40-20% Y: +150-10% Z: +80-20% _____ Rated value: P=pico farad, U=Micro farad Material: CERAMIC..... Ceramic MT-PAPER..... Metallized Paper POLYESTER..... Polyester MT-POLYEST.... Metallized Polyester POLYPRO..... Polypropylene MT-POLYPRO.... Metallized Polypropylene COMPO FILM..... Composite film MT-COMPO..... Metallized Composite STYRENE..... Styrene TA-SOLID..... Tantalum Solid AL-SOLID..... Aluminium Solid ELECT..... Electrolytic NP-ELECT..... Non-polarized Electrolytic OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic DL-ELECT..... Doble Layered Electrolytic RESISTOR CARBON 4.7K J A 1/4W _____ Rated Wattage Performance Symbols: A: General B: Non flammable Z: Low noise Other: Temperature coefficient Tolerance Symbols: A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% G: ±2% J: ±5% K: ±10% M: ±20% P: +5-15% _____ Rated value, ohms: K: 1,000, M: 1,000,000 Material: CARBON..... Carbon MT-FILM..... Metal Film OXIDE-MT..... Oxide Metal Film SOLID..... Composition MT-GLAZE..... Metal Glaze WIRE WOUND... Wire Wound CERAMIC RES.. Ceramic FUSIBLE RES.... Fusible			Parts List for CB5149 (C21EF25NB-00) 610 248 9224 ASSY, PWB, MAIN E7PC <i>52B05A</i> 1AA0B10E00100 TRANSISTOR Q101 405 013 3305 TR 2SC2216 (SAN) Q102 405 016 6204 TR 2SC3000-D 405 016 6402 TR 2SC3000-E 405 016 6600 TR 2SC3000-F Q122 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q124 406 007 1901 TR JC556A 406 007 1802 TR JC556B 405 004 4205 TR 2SA608-E-CTV-NP 405 004 4809 TR 2SA608-F-CTV-NP 405 028 7909 TR 2SA608-G-CTV-NP Q160 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q171 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q202 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q203 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q311 406 007 1901 TR JC556A 406 007 1802 TR JC556B 405 004 4205 TR 2SA608-E-CTV-NP 405 004 4809 TR 2SA608-F-CTV-NP 405 028 7909 TR 2SA608-G-CTV-NP Q312 405 058 0208 TR 2SC3807-R-CTV-YA Q313 405 018 9203 TR 2SC3895-T-CTV-YB Q353 406 007 2106 TR JC546A 406 007 2007 TR JC546B 405 019 1909 TR 2SC536-E-NP 405 019 2708 TR 2SC536-F-NP 405 019 3804 TR 2SC536-G-NP Q381 405 014 8408 TR 2SC2568(1)-K 405 014 8507 TR 2SC2568(1)-L 405 041 6507 TR 2SC2621-D-RA 405 041 6705 TR 2SC2621-E-RA Q431 405 011 1808 TR 2SC1627-O 405 011 1907 TR 2SC1627-Y		

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q432	405 013 6801	TR 2SC2274-E	Q803	405 019 2708	TR 2SC536-F-NP
	405 013 7006	TR 2SC2274-F		405 019 3804	TR 2SC536-G-NP
	405 022 6809	TR 2SD1651-CTV-YB		406 007 1901	TR JC556A
Q434	406 007 2106	TR JC546A		406 007 1802	TR JC556B
	406 007 2007	TR JC546B		405 004 4205	TR 2SA608-E-CTV-NP
	405 019 1909	TR 2SC536-E-NP		405 004 4809	TR 2SA608-F-CTV-NP
Q443	405 019 2708	TR 2SC536-F-NP		405 028 7909	TR 2SA608-G-CTV-NP
	405 019 3804	TR 2SC536-G-NP	Q804	406 007 2106	TR JC546A
	406 007 1901	TR JC556A		406 007 2007	TR JC546B
Q700	406 007 1802	TR JC556B		405 019 1909	TR 2SC536-E-NP
	405 004 4205	TR 2SA608-E-CTV-NP	Q805	405 019 2708	TR 2SC536-F-NP
	405 004 4809	TR 2SA608-F-CTV-NP		405 019 3804	TR 2SC536-G-NP
Q702	405 028 7909	TR 2SA608-G-CTV-NP		406 007 2106	TR JC546A
	406 007 1901	TR JC556A	Q806	406 007 2007	TR JC546B
	406 007 1802	TR JC556B		405 019 1909	TR 2SC536-E-NP
Q703	405 004 4205	TR 2SA608-E-CTV-NP		405 019 2708	TR 2SC536-F-NP
	405 004 4809	TR 2SA608-F-CTV-NP	Q808	405 019 3804	TR 2SC536-G-NP
	405 028 7909	TR 2SA608-G-CTV-NP		406 007 2106	TR JC546A
Q704	406 007 2106	TR JC546A		406 007 2007	TR JC546B
	406 007 2007	TR JC546B	Q809	405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
Q708	405 019 2708	TR 2SC536-F-NP		405 019 3804	TR 2SC536-G-NP
	405 019 3804	TR 2SC536-G-NP	Q810	406 007 2106	TR JC546A
	406 007 2106	TR JC546A		406 007 2007	TR JC546B
Q711	406 007 2007	TR JC546B		405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
	405 019 2708	TR 2SC536-F-NP	Q800	405 019 3804	TR 2SC536-G-NP
Q714	405 019 3804	TR 2SC536-G-NP		406 007 2106	TR JC546A
	406 007 2106	TR JC546A		406 007 2007	TR JC546B
Q721	406 007 2007	TR JC546B	Q801	405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
	405 019 2708	TR 2SC536-F-NP		405 019 3804	TR 2SC536-G-NP
Q722	405 019 3804	TR 2SC536-G-NP	Q802	406 007 2106	TR JC546A
	406 007 2106	TR JC546A		406 007 2007	TR JC546B
	406 007 2007	TR JC546B		405 019 1909	TR 2SC536-E-NP
Q781	405 019 1909	TR 2SC536-E-NP	INTEGRATED CIRCUIT		
	405 019 2708	TR 2SC536-F-NP	IC101	409 309 6209	IC TDA8361/N3
	405 019 3804	TR 2SC536-G-NP	IC171	409 301 4906	IC TDA7263M
Q800	406 007 2106	TR JC546A	IC191	409 026 8609	IC L78M05-RA
	406 007 2007	TR JC546B	IC270	409 291 0605	IC TDA4661/V2
	405 019 1909	TR 2SC536-E-NP	IC351	409 322 0505	IC TDA4662/V1
Q801	405 019 2708	TR 2SC536-F-NP		409 143 3402	IC AN78M12-LB
	405 019 3804	TR 2SC536-G-NP		409 026 9507	IC L78M12-RA
	406 007 2106	TR JC546A	IC352	409 285 5203	IC L78M08-RA
Q802	406 007 2007	TR JC546B	IC451	409 183 5008	IC LA7832
	405 019 1909	TR 2SC536-E-NP	IC701	410 178 3503	IC M37210M3-620SP
	405 019 2708	TR 2SC536-F-NP	IC790	409 247 7702	IC ST24C02AB1
Q803	405 019 3804	TR 2SC536-G-NP	CAPACITOR		
	406 007 2106	TR JC546A	C105	403 248 1400	ELECT 1U M 50V
	406 007 2007	TR JC546B	C108	403 011 3808	CERAMIC 120P J 50V
Q804	405 019 1909	TR 2SC536-E-NP	C109	403 009 3407	CERAMIC 100P J 50V
	405 019 2708	TR 2SC536-F-NP	C110	403 024 0009	CERAMIC 39P J 50V
	405 019 3804	TR 2SC536-G-NP	C113	403 069 8305	CERAMIC 0.01U Z 50V
Q805	406 007 2106	TR JC546A	C114	403 069 8305	CERAMIC 0.01U Z 50V
	406 007 2007	TR JC546B	C115	403 069 8305	CERAMIC 0.01U Z 50V
	405 019 1909	TR 2SC536-E-NP	C117	403 248 1608	ELECT 47U M 16V
Q806	405 019 2708	TR 2SC536-F-NP	C121	403 270 2901	MT-POLYEST 0.1U K 63V
	405 019 3804	TR 2SC536-G-NP	C122	403 243 6806	MT-COMPO 0.1U J 50V
	406 007 2106	TR JC546A		403 270 2901	MT-POLYEST 0.1U K 63V
Q808	406 007 2007	TR JC546B		403 243 6806	MT-COMPO 0.1U J 50V
	405 019 1909	TR 2SC536-E-NP	C127	403 069 0507	CERAMIC 1000P K 50V
	405 019 2708	TR 2SC536-F-NP	C128	403 050 0509	ELECT 2.2U M 50V
Q809	405 019 3804	TR 2SC536-G-NP	C129	403 028 2009	CERAMIC 56P J 50V
	406 007 2106	TR JC546A	C130	403 069 8305	CERAMIC 0.01U Z 50V
	406 007 2007	TR JC546B	C131	403 248 1608	ELECT 47U M 16V
Q810	405 019 1909	TR 2SC536-E-NP	C132	403 270 2901	MT-POLYEST 0.1U K 63V
	405 019 2708	TR 2SC536-F-NP			
	405 019 3804	TR 2SC536-G-NP			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	403 243 6806	MT-COMPO 0.1U J 50V	C303	403 076 7100	CERAMIC 1000P M 1K
C133	403 024 9705	CERAMIC 4P C 50V	C304	403 076 7100	CERAMIC 1000P M 1K
C135	403 270 2901	MT-POLYEST 0.1U K 63V	C305	403 076 7100	CERAMIC 1000P M 1K
	403 243 6806	MT-COMPO 0.1U J 50V	C306	403 076 7100	CERAMIC 1000P M 1K
C136	403 194 4609	ELECT 470U M 16V	C307	404 047 1707	ELECT 220U M 400V
C137	403 069 8305	CERAMIC 0.01U Z 50V	C313	403 061 8303	POLYESTER 4700P K 50V
C138	403 049 0800	ELECT 1U M 50V		403 179 1104	POLYESTER 4700P K 50V
C160	403 056 9704	POLYESTER 0.01U J 50V	C314	403 270 2901	MT-POLYEST 0.1U K 63V
	403 178 9309	POLYESTER 0.01U J 50V		403 243 6806	MT-COMPO 0.1U J 50V
C170	403 069 8305	CERAMIC 0.01U Z 50V	C315	403 058 2604	POLYESTER 0.015U J 50V
C171	403 073 6403	CERAMIC 470P K 50V		403 179 3207	POLYESTER 0.015U J 50V
C172	403 073 6403	CERAMIC 470P K 50V	C316	403 165 8407	CERAMIC 680P K 2K
C173	403 270 3601	MT-POLYEST 0.33U K 63V		403 186 1104	CERAMIC 680P K 2K
	403 256 4608	MT-COMPO 0.33U J 50V	C317	403 060 8403	POLYESTER 0.033U K 50V
C174	403 270 3601	MT-POLYEST 0.33U K 63V		403 179 1609	POLYESTER 0.033U K 50V
	403 256 4608	MT-COMPO 0.33U J 50V	△C331	404 060 6505	CERAMIC 2200P M 400V
C175	403 258 3609	ELECT 33U M 25V		404 060 6604	CERAMIC 2200P M 400V
C176	403 258 3609	ELECT 33U M 25V	C351	403 165 6106	CERAMIC 470P K 1K
C177	403 270 3403	MT-POLYEST 0.22U K 63V		403 186 2903	CERAMIC 470P K 1K
	403 263 5704	MT-COMPO 0.22U J 50V	C352	403 165 8605	CERAMIC 470P K 2K
C178	403 270 3403	MT-POLYEST 0.22U K 63V		403 186 1302	CERAMIC 470P K 2K
	403 263 5704	MT-COMPO 0.22U J 50V	C354	403 186 3108	CERAMIC 390P K 1K
C179	403 196 0203	ELECT 2200U M 35V	C361	404 042 4505	ELECT 220U M 160V
C180	403 270 3403	MT-POLYEST 0.22U K 63V	C362	403 281 1108	ELECT 22U M 250V
	403 263 5704	MT-COMPO 0.22U J 50V	C363	403 233 1804	ELECT 330U M 35V
C181	403 270 3403	MT-POLYEST 0.22U K 63V	C364	403 148 0404	ELECT 1000U M 25V
	403 263 5704	MT-COMPO 0.22U J 50V	C365	403 158 1309	ELECT 2200U M 35V
C182	403 196 0203	ELECT 2200U M 35V	C371	403 201 5001	ELECT 330U M 16V
C183	403 196 0203	ELECT 2200U M 35V	C372	403 194 4609	ELECT 470U M 16V
C188	403 248 2001	ELECT 4.7U M 25V	C382	403 210 5504	ELECT 470U M 35V
C189	403 248 1608	ELECT 47U M 16V	C383	403 160 0000	ELECT 470U M 10V
C191	403 258 3401	ELECT 10U M 25V	C400	403 014 0200	CERAMIC 18P J 50V
C192	403 258 3401	ELECT 10U M 25V	C401	403 270 2901	MT-POLYEST 0.1U K 63V
C193	403 244 1206	ELECT 100U M 10V		403 243 6806	MT-COMPO 0.1U J 50V
C202	403 270 2901	MT-POLYEST 0.1U K 63V	C402	403 270 3809	MT-POLYEST 0.047U K 63V
	403 243 6806	MT-COMPO 0.1U J 50V		403 256 1102	MT-COMPO 0.047U J 50V
C203	403 061 8303	POLYESTER 4700P K 50V	C403	403 061 8303	POLYESTER 4700P K 50V
	403 179 1104	POLYESTER 4700P K 50V		403 179 1104	POLYESTER 4700P K 50V
C204	403 270 2901	MT-POLYEST 0.1U K 63V	C404	403 086 2300	NP-ELECT 1U M 50V
	403 243 6806	MT-COMPO 0.1U J 50V	C405	403 060 0704	POLYESTER 2700P K 50V
C205	403 270 2901	MT-POLYEST 0.1U K 63V		403 179 2200	POLYESTER 2700P K 50V
	403 243 6806	MT-COMPO 0.1U J 50V	C406	403 059 6205	POLYESTER 0.022U K 50V
C206	403 270 3809	MT-POLYEST 0.047U K 63V		403 179 2408	POLYESTER 0.022U K 50V
	403 256 1102	MT-COMPO 0.047U J 50V	C407	403 233 0302	ELECT 100U M 16V
C207	403 248 2803	ELECT 2.2U M 50V	C420	404 063 4201	MT-POLYPRO 8600P J 1.5K
C208	403 270 2901	MT-POLYEST 0.1U K 63V	C421	403 218 3106	ELECT 1000U M 16V
	403 243 6806	MT-COMPO 0.1U J 50V	C422	403 082 8405	POLYPRO 0.22U J 200V
C209	403 270 2901	MT-POLYEST 0.1U K 63V	C426	403 066 6106	MT-POLYEST 0.47U J 250V
	403 243 6806	MT-COMPO 0.1U J 50V	C427	403 165 7004	CERAMIC 470P K 3K
C210	403 270 2901	MT-POLYEST 0.1U K 63V		403 185 9705	CERAMIC 470P K 3K
	403 243 6806	MT-COMPO 0.1U J 50V	C432	403 075 7101	CERAMIC 1000P K 500V
C211	403 248 2803	ELECT 2.2U M 50V	C433	403 076 3102	CERAMIC 3900P K 500V
C212	403 248 2803	ELECT 2.2U M 50V	C434	403 229 1207	ELECT 47U M 35V
C213	403 057 0601	POLYESTER 0.01U K 50V	C441	403 082 7408	POLYPRO 0.15U J 200V
	403 179 3801	POLYESTER 0.01U K 50V	C442	403 082 8009	POLYPRO 0.2U J 200V
C215	403 270 3908	MT-POLYEST 0.47U K 63V	C443	403 201 5001	ELECT 330U M 16V
	403 264 2207	MT-COMPO 0.47U J 50V	C444	403 259 8801	ELECT 0.47U M 160V
C216	403 270 2901	MT-POLYEST 0.1U K 63V	C451	403 210 5504	ELECT 470U M 35V
	403 243 6806	MT-COMPO 0.1U J 50V	C452	403 217 1103	ELECT 220U M 35V
C221	403 270 2901	MT-POLYEST 0.1U K 63V	C453	403 023 9706	CERAMIC 39P J 50V
	403 243 6806	MT-COMPO 0.1U J 50V	C454	403 069 8305	CERAMIC 0.01U Z 50V
C231	403 194 2100	NP-ELECT 4.7U M 100V	C455	403 074 5702	CERAMIC 560P K 50V
C232	403 138 1602	ELECT 1U M 100V	C456	403 248 1905	ELECT 10U M 16V
C270	403 059 6205	POLYESTER 0.022U K 50V	C458	403 233 0807	ELECT 10U M 50V
	403 179 2408	POLYESTER 0.022U K 50V	C459	403 065 9801	MT-POLYEST 0.22U K 100V
C271	403 069 0507	CERAMIC 1000P K 50V		403 188 0907	MT-POLYEST 0.22U K 100V
C272	403 069 0507	CERAMIC 1000P K 50V	C461A	403 209 7205	ELECT 2200U M 25V
C275	403 248 1905	ELECT 10U M 16V	C463	403 065 9405	MT-POLYEST 0.15U K 100V
C301	404 047 3602	MT-POLYEST 0.1U M 125V	C469	403 233 0807	ELECT 10U M 50V
	404 044 0901	MT-COMPO 0.1U M 250V	C700	403 068 9006	CERAMIC 100P K 50V
C302	404 047 3602	MT-POLYEST 0.1U M 125V	C701	403 248 2001	ELECT 4.7U M 25V
	404 044 0901	MT-COMPO 0.1U M 250V	C704	403 068 9006	CERAMIC 100P K 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C705	403 068 9006	CERAMIC 100P K 50V	R191	407 148 0105	ZENER DIODE EQA02-05A
C706	403 068 9006	CERAMIC 100P K 50V	R202	401 024 7707	CARBON 100K JA 1/6W
C707	403 270 3403	MT-POLYEST 0.22U K 63V	R203	401 012 4503	CARBON 100 JA 1/4W
	403 263 5704	MT-COMPO 0.22U J 50V	R204	401 012 4503	CARBON 100 JA 1/4W
C708	403 270 3403	MT-POLYEST 0.22U K 63V	R205	401 012 4503	CARBON 100 JA 1/4W
	403 263 5704	MT-COMPO 0.22U J 50V	R206	401 024 6700	CARBON 100 JA 1/6W
C710	403 068 9006	CERAMIC 100P K 50V	R207	401 024 6700	CARBON 100 JA 1/6W
C711	403 248 2001	ELECT 4.7U M 25V	R208	401 024 6700	CARBON 100 JA 1/6W
C712	403 248 1400	ELECT 1U M 50V	R209	401 022 3107	CARBON 6.8K JA 1/4W
C713	403 248 1400	ELECT 1U M 50V	R210	401 025 1902	CARBON 15K JA 1/6W
C716	403 233 1507	ELECT 4.7U M 50V	R212	401 025 4200	CARBON 1.8K JA 1/6W
C717	403 068 9006	CERAMIC 100P K 50V	R213	401 016 4806	CARBON 22K JA 1/4W
C718	403 069 8305	CERAMIC 0.01U Z 50V	R215	401 025 4200	CARBON 1.8K JA 1/6W
C719	403 069 0507	CERAMIC 1000P K 50V	R216	401 012 7009	CARBON 10K JA 1/4W
C721	403 270 2901	MT-POLYEST 0.1U K 63V	R219	401 019 1000	CARBON 390 JA 1/4W
	403 243 6806	MT-COMPO 0.1U J 50V	R220	401 027 5007	CARBON 68 JA 1/6W
C722	403 248 1608	ELECT 47U M 16V	R221	401 024 6700	CARBON 100 JA 1/6W
C723	403 026 0700	CERAMIC 47P J 50V	R231	401 014 6109	CARBON 150K JA 1/4W
C724	403 026 0700	CERAMIC 47P J 50V	R232	401 012 5708	CARBON 1K JA 1/4W
C727	403 270 2901	MT-POLYEST 0.1U K 63V	R233	401 000 7509	SOLID 1.5K KA 1/2W
	403 243 6806	MT-COMPO 0.1U J 50V	R235	401 026 7408	CARBON 39K JA 1/6W
C729	403 248 1905	ELECT 10U M 16V	R275	401 025 7409	CARBON 220 JA 1/6W
C744	403 068 9006	CERAMIC 100P K 50V	R301	401 008 8607	CARBON 220K JA 1/2W
C802	403 248 1905	ELECT 10U M 16V	R302	402 067 7709	WIRE WOUND 3.9 KA 7W
C805	403 248 1905	ELECT 10U M 16V	R311	401 027 2600	CARBON 5.6K JA 1/6W
C811	403 248 1905	ELECT 10U M 16V	R315	401 025 8208	CARBON 22K JA 1/6W
C814	403 248 1905	ELECT 10U M 16V	R317	401 024 7004	CARBON 1K JA 1/6W
C817	403 270 3908	MT-POLYEST 0.47U K 63V	R319	401 016 1508	CARBON 22 JA 1/4W
	403 264 2207	MT-COMPO 0.47U J 50V	R320	401 007 5805	CARBON 120K JA 1/2W
C818	403 248 1905	ELECT 10U M 16V	R321	401 007 5805	CARBON 120K JA 1/2W
C821	403 258 3401	ELECT 10U M 25V	R322	401 014 5201	CARBON 15K JA 1/4W
C822	403 044 7309	ELECT 10U M 25V	R323	401 026 1000	CARBON 2.7K JA 1/6W
RESISTOR			R324	401 069 1708	OXIDE-MT 68 JA 2W
R101	401 025 7805	CARBON 2.2K JA 1/6W	R325	401 069 1609	OXIDE-MT 68 JA 2W
R103	401 012 4503	CARBON 100 JA 1/4W	R326	401 018 7805	CARBON 3.6K GA 1/4W
R104	401 027 2600	CARBON 5.6K JA 1/6W	△R331	402 000 8305	SOLID 5.6M KA 1/2W
R105	401 024 7004	CARBON 1K JA 1/6W	△R332	402 000 8305	SOLID 5.6M KA 1/2W
R106	401 025 7409	CARBON 220 JA 1/6W	R352	401 012 8105	CARBON 100K JA 1/4W
R107	401 026 0409	CARBON 27 JA 1/6W	R353	401 026 9907	CARBON 4.7K JA 1/6W
R108	401 026 3905	CARBON 330 JA 1/6W	R354	401 014 6109	CARBON 150K JA 1/4W
R121	401 027 0309	CARBON 47K JA 1/6W	R355	401 010 4307	CARBON 47K JA 1/2W
R122	401 025 8703	CARBON 220K JA 1/6W	R356	401 025 8208	CARBON 22K JA 1/6W
R123	401 025 8703	CARBON 220K JA 1/6W	R360	402 055 7100	WIRE WOUND 3.9 KA 3W
R124	401 027 5502	CARBON 6.8K JA 1/6W	R362	402 067 8904	WIRE WOUND 3.9 KA 5W
R126	401 027 2600	CARBON 5.6K JA 1/6W	R363	401 065 5809	OXIDE-MT 15 JA 2W
R127	401 024 6700	CARBON 100 JA 1/6W	R364	401 010 1504	CARBON 4.7 JA 1/2W
R131	401 022 3107	CARBON 6.8K JA 1/4W	R368	401 066 9004	OXIDE-MT 27 JA 2W
R132	401 020 2904	CARBON 47K JA 1/4W	R382	401 026 4308	CARBON 3.3K JA 1/6W
R133	401 015 1608	CARBON 180 JA 1/4W	R385	401 025 7409	CARBON 220 JA 1/6W
R134	401 012 5708	CARBON 1K JA 1/4W	R393	401 024 9701	CARBON 12K JA 1/6W
R135	401 027 2303	CARBON 560 JA 1/6W	R394	401 026 7606	CARBON 390K JA 1/6W
R136	401 027 0309	CARBON 47K JA 1/6W	R400	401 027 0309	CARBON 47K JA 1/6W
R138	401 025 1308	CARBON 150 JA 1/6W	R401	401 024 6700	CARBON 100 JA 1/6W
R160	401 027 0309	CARBON 47K JA 1/6W	R402	401 027 9302	CARBON 820K JA 1/6W
R161	401 026 1000	CARBON 2.7K JA 1/6W	R403	401 012 4503	CARBON 100 JA 1/4W
R162	401 026 4605	CARBON 33K JA 1/6W	R404	401 025 8208	CARBON 22K JA 1/6W
R163	401 026 9907	CARBON 4.7K JA 1/6W	R405	401 024 6700	CARBON 100 JA 1/6W
R171	401 019 9600	CARBON 47 JA 1/4W	R406	401 026 7606	CARBON 390K JA 1/6W
R172	401 010 1504	CARBON 4.7 JA 1/2W	R407	401 025 8208	CARBON 22K JA 1/6W
R173	401 014 4105	CARBON 1.5K JA 1/4W	R408	401 012 4503	CARBON 100 JA 1/4W
R174	401 010 1504	CARBON 4.7 JA 1/2W	R409	401 026 9907	CARBON 4.7K JA 1/6W
R175	401 019 9600	CARBON 47 JA 1/4W	R410	401 025 8208	CARBON 22K JA 1/6W
R176	401 014 4105	CARBON 1.5K JA 1/4W	R420	401 024 7400	CARBON 10K JA 1/6W
R177	401 024 9701	CARBON 12K JA 1/6W	R422	402 069 8704	WIRE WOUND 8.2 KA 7W
R178	401 025 7805	CARBON 2.2K JA 1/6W	R432	401 026 3905	CARBON 330 JA 1/6W
R179	401 024 9701	CARBON 12K JA 1/6W	R433	401 010 3102	CARBON 470 JA 1/2W
R180	401 026 7408	CARBON 39K JA 1/6W	R434	401 067 9003	OXIDE-MT 390 JA 2W
R181	401 026 7408	CARBON 39K JA 1/6W	R436	401 014 5201	CARBON 15K JA 1/4W
R182	401 024 7400	CARBON 10K JA 1/6W	R441	401 058 3607	OXIDE-MT 1K JA 1W
R189	401 024 7400	CARBON 10K JA 1/6W	R444	401 024 6700	CARBON 100 JA 1/6W
R190	401 066 9004	OXIDE-MT 27 JA 2W	R445	401 024 7707	CARBON 100K JA 1/6W
			R446	401 015 4708	CARBON 180K JA 1/4W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R448A	401 008 0908	CARBON 180 JA 1/2W	R812	401 025 4606	CARBON 18K JA 1/6W
R449	401 007 6901	CARBON 15 JA 1/2W	R814	401 022 3107	CARBON 6.8K JA 1/4W
R450	401 027 3003	CARBON 56K JA 1/6W	R815	401 014 5201	CARBON 15K JA 1/4W
R451	401 019 6203	CARBON 4.7 JA 1/4W	R816	401 024 7400	CARBON 10K JA 1/6W
R452	401 027 8602	CARBON 8.2K JA 1/6W	R818	401 027 6608	CARBON 75 JA 1/6W
R453	401 015 2704	CARBON 1.8K JA 1/4W	R819	401 025 8208	CARBON 22K JA 1/6W
R454	401 025 7409	CARBON 220 JA 1/6W	R820	401 026 1000	CARBON 2.7K JA 1/6W
R455	401 025 7805	CARBON 2.2K JA 1/6W	R822	401 025 4606	CARBON 18K JA 1/6W
R456	401 020 2003	CARBON 4.7K JA 1/4W	R823	401 027 5502	CARBON 6.8K JA 1/6W
R457	401 025 7805	CARBON 2.2K JA 1/6W	R824	401 026 9907	CARBON 4.7K JA 1/6W
R459	401 057 7408	OXIDE-MT 0.82 JA 1W	R825	401 021 3009	CARBON 5.6K JA 1/4W
R460	401 060 2704	OXIDE-MT 220 JA 1W	R826	401 024 7400	CARBON 10K JA 1/6W
R461	401 063 6303	OXIDE-MT 820 JA 1W	R827	401 027 6608	CARBON 75 JA 1/6W
R475	401 009 5803	CARBON 330 JA 1/2W	R828	401 026 9907	CARBON 4.7K JA 1/6W
R476	401 025 7805	CARBON 2.2K JA 1/6W	R829	401 026 9600	CARBON 470 JA 1/6W
R477	401 021 3009	CARBON 5.6K JA 1/4W	R830	401 012 7009	CARBON 10K JA 1/4W
R479	401 016 3809	CARBON 2.2K JA 1/4W	R831	401 027 6608	CARBON 75 JA 1/6W
R481	401 067 3001	OXIDE-MT 3.9 JA 2W	R832	401 027 6608	CARBON 75 JA 1/6W
R700	401 024 7400	CARBON 10K JA 1/6W	R845	401 012 5708	CARBON 1K JA 1/4W
R701	401 024 7400	CARBON 10K JA 1/6W	R846	401 024 9305	CARBON 1.2K JA 1/6W
R702	401 026 4308	CARBON 3.3K JA 1/6W	R847	401 025 7805	CARBON 2.2K JA 1/6W
R704	401 026 7002	CARBON 3.9K JA 1/6W	R848	401 024 7707	CARBON 100K JA 1/6W
R705	401 026 4308	CARBON 3.3K JA 1/6W	R849	401 026 4308	CARBON 3.3K JA 1/6W
R706	401 012 7009	CARBON 10K JA 1/4W	R852	401 027 6608	CARBON 75 JA 1/6W
R707	401 012 5708	CARBON 1K JA 1/4W	R853	401 024 6700	CARBON 100 JA 1/6W
R708	401 012 5708	CARBON 1K JA 1/4W	R854	401 024 9305	CARBON 1.2K JA 1/6W
R710	401 024 7400	CARBON 10K JA 1/6W	R856	401 024 7400	CARBON 10K JA 1/6W
R711	401 012 7009	CARBON 10K JA 1/4W	R857	401 012 7009	CARBON 10K JA 1/4W
R712	401 025 7805	CARBON 2.2K JA 1/6W	R858	401 026 9600	CARBON 470 JA 1/6W
R713	401 024 7400	CARBON 10K JA 1/6W	R860	401 024 7004	CARBON 1K JA 1/6W
R714	401 026 1307	CARBON 27K JA 1/6W	R863	401 027 9005	CARBON 82K JA 1/6W
R715	401 025 8208	CARBON 22K JA 1/6W	R864	401 023 3700	CARBON 82K JA 1/4W
R716	401 027 0309	CARBON 47K JA 1/6W	R866	401 027 5502	CARBON 6.8K JA 1/6W
R717	401 024 9305	CARBON 1.2K JA 1/6W	R867	401 027 8602	CARBON 8.2K JA 1/6W
R718	401 026 7002	CARBON 3.9K JA 1/6W			
R719	401 012 7009	CARBON 10K JA 1/4W			
R721	401 026 4605	CARBON 33K JA 1/6W			
R723	401 024 7004	CARBON 1K JA 1/6W			
R724	401 024 7400	CARBON 10K JA 1/6W			
R726	401 024 7400	CARBON 10K JA 1/6W			
R731	401 025 7805	CARBON 2.2K JA 1/6W			
R732	401 024 7400	CARBON 10K JA 1/6W			
R734	401 026 9907	CARBON 4.7K JA 1/6W			
R735	401 027 8602	CARBON 8.2K JA 1/6W			
R736	401 025 1605	CARBON 1.5K JA 1/6W			
R737	401 014 4105	CARBON 1.5K JA 1/4W			
R738	401 026 6609	CARBON 390 JA 1/6W			
R743	401 025 1308	CARBON 150 JA 1/6W			
R744	401 026 7002	CARBON 3.9K JA 1/6W			
R745	401 025 1308	CARBON 150 JA 1/6W			
R746	401 026 7002	CARBON 3.9K JA 1/6W			
R758	401 027 2600	CARBON 5.6K JA 1/6W			
R759	401 025 7805	CARBON 2.2K JA 1/6W			
R761	401 068 4601	OXIDE-MT 4.7K JA 2W			
R762	401 024 7400	CARBON 10K JA 1/6W			
R763	401 025 1902	CARBON 15K JA 1/6W			
R764	401 025 4903	CARBON 180K JA 1/6W			
R767	401 024 6700	CARBON 100 JA 1/6W			
R775	401 012 7009	CARBON 10K JA 1/4W			
R776	401 024 7707	CARBON 100K JA 1/6W			
R781	401 026 9907	CARBON 4.7K JA 1/6W			
R782	401 025 8208	CARBON 22K JA 1/6W			
R791	401 068 4601	OXIDE-MT 4.7K JA 2W			
R792	401 014 5201	CARBON 15K JA 1/4W			
R794	401 012 7009	CARBON 10K JA 1/4W			
R796	401 013 5301	CARBON 1.2K JA 1/4W			
R800	401 027 2303	CARBON 560 JA 1/6W			
R801	401 024 7707	CARBON 100K JA 1/6W			
R803	401 024 7707	CARBON 100K JA 1/6W			
R804	401 025 7805	CARBON 2.2K JA 1/6W			
R809	401 027 2303	CARBON 560 JA 1/6W			
R810	401 024 7707	CARBON 100K JA 1/6W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
L706	610 031 3873	PEAKING COIL 10UHK		407 012 5809	DIODE 1SS176
DIODE			D401	407 075 9905	ZENER DIODE EQA03-11A
D130	407 075 9905	ZENER DIODE EQA03-11A	D431	407 048 4906	ZENER DIODE EQA02-09A
D189	407 012 4406	DIODE 1SS133		407 048 5101	ZENER DIODE EQA02-09B
	407 012 5809	DIODE 1SS176	D432	407 007 6606	DIODE ES1
D190	407 148 0105	ZENER DIODE EQA02-05A	D433	407 012 4406	DIODE 1SS133
	407 148 0204	ZENER DIODE EQA02-05B		407 012 5809	DIODE 1SS176
D191	408 007 8607	DIODE 1N4148	D440	407 012 4406	DIODE 1SS133
	407 013 1206	DIODE 1S1555		407 012 5809	DIODE 1SS176
D201	407 075 9905	ZENER DIODE EQA03-11A	D441	407 012 4406	DIODE 1SS133
D202	407 075 9905	ZENER DIODE EQA03-11A		407 012 5809	DIODE 1SS176
D203	407 075 9905	ZENER DIODE EQA03-11A	D442	407 012 4406	DIODE 1SS133
D210	407 012 4406	DIODE 1SS133		407 012 5809	DIODE 1SS176
	407 012 5809	DIODE 1SS176	D443	407 012 4406	DIODE 1SS133
D231	407 005 4505	DIODE DS442X		407 012 5809	DIODE 1SS176
	407 013 1008	DIODE 1S1553	D446	407 012 4406	DIODE 1SS133
	407 013 4306	DIODE 1S2076A		407 012 5809	DIODE 1SS176
	407 013 6508	DIODE 1S2471	D451	407 005 7308	DIODE EM01Z
D232	408 007 8607	DIODE 1N4148	D452	408 007 8607	DIODE 1N4148
	407 013 1206	DIODE 1S1555		407 013 1206	DIODE 1S1555
D275	407 048 1202	ZENER DIODE EQA02-05E	D467	407 005 4505	DIODE DS442X
D302	407 005 7308	DIODE EM01Z		407 013 1008	DIODE 1S1553
D303	407 006 6300	DIODE ERC05-10B		407 013 4306	DIODE 1S2076A
	407 009 6901	DIODE RM11C		407 013 6508	DIODE 1S2471
	407 064 6908	DIODE TVR4N(X)	D468	407 012 4406	DIODE 1SS133
D304	407 006 6300	DIODE ERC05-10B		407 012 5809	DIODE 1SS176
	407 009 6901	DIODE RM11C	D471	407 118 2207	ZENER DIODE 1Z75
	407 064 6908	DIODE TVR4N(X)	D701	407 116 6504	LED SLP-181B-51
D305	407 006 6300	DIODE ERC05-10B	D703	407 055 7907	ZENER DIODE RD3.6EL
	407 009 6901	DIODE RM11C	D704	409 013 0104	IC HZT33
	407 064 6908	DIODE TVR4N(X)	D705	407 075 9905	ZENER DIODE EQA03-11A
D306	407 006 6300	DIODE ERC05-10B	D800	407 075 9905	ZENER DIODE EQA03-11A
	407 009 6901	DIODE RM11C	D801	407 075 9905	ZENER DIODE EQA03-11A
	407 064 6908	DIODE TVR4N(X)	D803	407 075 9905	ZENER DIODE EQA03-11A
D314	407 005 4505	DIODE DS442X	D804	407 075 9905	ZENER DIODE EQA03-11A
	407 013 1008	DIODE 1S1553	D807	407 075 9905	ZENER DIODE EQA03-11A
	407 013 4306	DIODE 1S2076A	D808	407 075 9905	ZENER DIODE EQA03-11A
	407 013 6508	DIODE 1S2471	D809	407 075 9905	ZENER DIODE EQA03-11A
D315 - CNY17F	407 105 8700	PHOTO COUPLE PC113B	D810	407 012 4406	DIODE 1SS133
	408 009 8407	PHOTO COUPLE CNY17F-3OPT6		407 012 5809	DIODE 1SS176
D316	407 005 4505	DIODE DS442X	D811	407 075 9905	ZENER DIODE EQA03-11A
	407 013 1008	DIODE 1S1553	D812	407 075 9905	ZENER DIODE EQA03-11A
	407 013 4306	DIODE 1S2076A	D813	407 075 9905	ZENER DIODE EQA03-11A
	407 013 6508	DIODE 1S2471	D816	407 075 9905	ZENER DIODE EQA03-11A
D317	407 007 6606	DIODE ES1			
	407 007 6903	DIODE ES1Z	MISCELLANEOUS		
	408 009 9008	DIODE BYD33D	△F301	423 022 2102	FUSE 250V 4A
D318	407 005 4505	DIODE DS442X	A101	610 239 1145	UHF VARACTOR TUNER
	407 013 1008	DIODE 1S1553	A701	610 224 5806	RC PREAMP 409-1L
	407 013 4306	DIODE 1S2076A	KA	610 221 7391	SOCKET 6P
	407 013 6508	DIODE 1S2471	KB	610 221 7407	SOCKET 8P
D319	407 048 4005	ZENER DIODE EQA02-08A	KC	610 221 7391	SOCKET 6P
	407 048 4203	ZENER DIODE EQA02-08B	KD	610 221 7407	SOCKET 8P
D351	407 007 7702	DIODE EU2A	K801	610 234 3779	SOCKET 21P
D352	407 007 7504	DIODE EU1C	K801Z	610 081 9887	SOCKET MTG BRKT-D8PC
D353	407 007 7603	DIODE EU2	△PS301	408 003 6805	THERMISTOR 902P44E180MR14
	407 007 7801	DIODE EU2Z		408 015 1904	THERMISTOR PA3A5180B270
D354	407 106 2806	DIODE RU3YX		408 000 3906	TH PTH451A112BF180M270
D355	407 103 1604	DIODE RU4YX LF-J3	SW220	610 011 2728	LEVER SWITCH
D361	407 048 2407	ZENER DIODE EQA02-06E	△SW301	645 003 6811	SWITCH, PUSH POWER 2P-2T
	407 048 2605	ZENER DIODE EQA02-06F	SW451	610 011 2728	LEVER SWITCH
D381	407 048 2001	ZENER DIODE EQA02-06B	SW701	610 011 2698	PUSH SWITCH
D384	407 005 4505	DIODE DS442X	SW702	610 011 2698	PUSH SWITCH
	407 013 1008	DIODE 1S1553	SW703	610 011 2698	PUSH SWITCH
	407 013 4306	DIODE 1S2076A	SW704	610 011 2698	PUSH SWITCH
	407 013 6508	DIODE 1S2471	SW705	610 011 2698	PUSH SWITCH
D391	408 007 8607	DIODE 1N4148	SW706	610 011 2698	PUSH SWITCH
	407 013 1206	DIODE 1S1555	X101	421 002 4702	SAW F TSF5322
D392	408 007 8607	DIODE 1N4148	X124	610 015 2885	CERAMIC FILTER
	407 013 1206	DIODE 1S1555	X400	610 249 5577	CRYSTAL OSCILLATOR
D393	407 012 4406	DIODE 1SS133	X701	645 000 6692	OSC, CERAMIC 8.00MHZ
				645 002 1039	OSC, CERAMIC 8.00MHZ

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
610 252 3188 ASSY, PWB, NICAM&MONO E7PC					
TRANSISTOR					
Q2901	405 015 8704	TR 2SC2812-L6-TA			
Q2902	405 015 8704	TR 2SC2812-L6-TA			
Q2903	405 015 8704	TR 2SC2812-L6-TA			
Q2961	405 015 8704	TR 2SC2812-L6-TA			
Q2962	405 015 8704	TR 2SC2812-L6-TA			
INTEGRATED CIRCUIT					
IC2901	410 019 7103	IC TDA2546A			
IC2902	409 304 6006	IC TDA8205			
IC2903	409 304 5900	IC TDA8204			
IC2904	409 316 4601	IC TDA8424			
CAPACITOR					
C2900	403 069 9500	CERAMIC 0.01U Z 50V			
C2901	403 166 8000	MT-POLYEST 0.33U J 63V			
	403 256 4608	MT-COMPO 0.33U J 50V			
C2902	403 166 7805	MT-POLYEST 0.047U J 63V			
	403 256 1102	MT-COMPO 0.047U J 50V			
C2903	403 152 4702	NP-ELECT 10U M 16V			
C2906	403 013 3004	CERAMIC 150P J 50V			
C2909	403 069 9500	CERAMIC 0.01U Z 50V			
C2910	403 069 9500	CERAMIC 0.01U Z 50V			
C2911	403 073 9107	CERAMIC 4700P K 50V			
C2913	403 028 4409	CERAMIC 56P J 50V			
C2915	403 074 6600	CERAMIC 560P K 50V			
C2916	403 069 9500	CERAMIC 0.01U Z 50V			
C2917	403 248 1905	ELECT 10U M 16V			
C2918	403 069 9500	CERAMIC 0.01U Z 50V			
C2919	403 069 9500	CERAMIC 0.01U Z 50V			
C2920	403 069 9500	CERAMIC 0.01U Z 50V			
C2921	403 069 9500	CERAMIC 0.01U Z 50V			
C2922	403 069 9500	CERAMIC 0.01U Z 50V			
C2923	403 069 9500	CERAMIC 0.01U Z 50V			
C2924	403 043 9601	ELECT 47U M 16V			
C2926	403 069 9500	CERAMIC 0.01U Z 50V			
C2927	403 043 9601	ELECT 47U M 16V			
C2928	403 069 9500	CERAMIC 0.01U Z 50V			
C2929	403 043 9601	ELECT 47U M 16V			
C2930	403 044 7309	ELECT 10U M 25V			
C2931	403 018 7403	CERAMIC 220P J 50V			
C2932	403 018 7403	CERAMIC 220P J 50V			
C2933	401 037 5004	MT-GLAZE 0.000 ZA 1/10W			
C2934	403 166 6808	MT-POLYEST 0.1U J 63V			
	403 243 6806	MT-COMPO 0.1U J 50V			
C2935	403 258 3401	ELECT 10U M 25V			
C2936	403 069 9500	CERAMIC 0.01U Z 50V			
C2937	403 075 0706	CERAMIC 6800P K 50V			
C2938	403 069 9500	CERAMIC 0.01U Z 50V			
C2939	403 075 0706	CERAMIC 6800P K 50V			
C2940	403 074 9502	CERAMIC 680P K 50V			
C2941	403 248 1905	ELECT 10U M 16V			
C2942	403 248 1905	ELECT 10U M 16V			
C2943	403 248 1905	ELECT 10U M 16V			
C2944	403 248 1905	ELECT 10U M 16V			
C2946	403 038 6707	ELECT 220U M 6.3V			
C2949	403 012 6808	CERAMIC 15P J 50V			
C2951	403 013 3004	CERAMIC 150P J 50V			
C2952	403 075 0706	CERAMIC 6800P K 50V			
C2953	403 011 4904	CERAMIC 120P J 50V			
C2954	403 166 8109	MT-POLYEST 0.22U J 63V			
	403 263 5704	MT-COMPO 0.22U J 50V			
C2956	403 166 8208	MT-POLYEST 0.18U J 63V			
	403 264 1903	MT-COMPO 0.18U J 50V			
C2961	403 233 0302	ELECT 100U M 16V			
C2962	403 166 6808	MT-POLYEST 0.1U J 63V			
	403 243 6806	MT-COMPO 0.1U J 50V			
C2963	403 060 8403	POLYESTER 0.033U K 50V			
			403 179 1609	POLYESTER	0.033U K 50V
			C2964	403 074 7607	CERAMIC 5600P K 50V
			C2968	403 074 7607	CERAMIC 5600P K 50V
			C2969	403 060 8403	POLYESTER 0.033U K 50V
				403 179 1609	POLYESTER 0.033U K 50V
			RESISTOR		
			R2904	401 039 0304	MT-GLAZE 820 JA 1/10W
			R2906	401 039 0304	MT-GLAZE 820 JA 1/10W
			R2907	401 038 7601	MT-GLAZE 560 JA 1/10W
			R2908	401 038 2002	MT-GLAZE 270 JA 1/10W
			R2909	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2911	401 037 5608	MT-GLAZE 10K JA 1/10W
			R2912	401 038 2002	MT-GLAZE 270 JA 1/10W
			R2913	401 038 0701	MT-GLAZE 2.2K JA 1/10W
			R2914	401 038 0701	MT-GLAZE 2.2K JA 1/10W
			R2916	401 038 4907	MT-GLAZE 39 JA 1/10W
			R2917	401 038 6208	MT-GLAZE 47 JA 1/10W
			R2918	401 038 9001	MT-GLAZE 680 JA 1/10W
			R2919	401 038 7700	MT-GLAZE 5.6K JA 1/10W
			R2921	401 038 7700	MT-GLAZE 5.6K JA 1/10W
			R2922	401 038 6000	MT-GLAZE 43K JA 1/10W
			R2923	401 039 0403	MT-GLAZE 8.2K JA 1/10W
			R2924	401 038 7700	MT-GLAZE 5.6K JA 1/10W
			R2926	401 038 6000	MT-GLAZE 43K JA 1/10W
			R2929	401 038 5300	MT-GLAZE 39K JA 1/10W
			R2931	401 094 1902	MT-GLAZE 10M JA 1/10W
			R2932	401 037 7800	MT-GLAZE 150 JA 1/10W
			R2933	401 037 6704	MT-GLAZE 1.2K JA 1/10W
			R2934	401 037 5400	MT-GLAZE 1K JA 1/10W
			R2936	401 037 5806	MT-GLAZE 1M JA 1/10W
			R2937	401 038 2002	MT-GLAZE 270 JA 1/10W
			R2938	401 037 6704	MT-GLAZE 1.2K JA 1/10W
			R2939	401 037 5400	MT-GLAZE 1K JA 1/10W
			R2941	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2942	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2946	401 037 5004	MT-GLAZE 0.000 ZA 1/10W
			R2956	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2957	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2961	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2962	401 038 7601	MT-GLAZE 560 JA 1/10W
			R2963	401 037 5202	MT-GLAZE 100 JA 1/10W
			R2964	401 038 7601	MT-GLAZE 560 JA 1/10W
			TRANSFORMER		
			T2902	610 037 5512	S COIL
			T2903	610 037 4522	S COIL
			T2904	610 208 6072	S BLOCK
			COIL		
			L2901	610 029 5384	PEAKING COIL 2.2UHK
			L2902	610 029 5384	PEAKING COIL 2.2UHK
			L2903	610 029 5384	PEAKING COIL 2.2UHK
			L2904	610 029 5384	PEAKING COIL 2.2UHK
			MISCELLANEOUS		
			K29A	610 234 0457	PLUG 6P
			K29B	610 234 0471	PLUG 8P
			X2900	421 002 4405	SAW F TSB5303
			X2901	645 003 2813	CERAMIC FILTER
			X2904	610 015 2885	CERAMIC FILTER
			X2906	610 233 0649	CRYSTAL OSCILLATOR
			610 249 3733 ASSY, PWB, TEXT E7PC		
			TRANSISTOR		
			Q1001	405 015 8704	TR 2SC2812-L6-TA
			Q1002	405 015 8704	TR 2SC2812-L6-TA
			Q1003	405 015 8704	TR 2SC2812-L6-TA
			Q1004	405 015 8704	TR 2SC2812-L6-TA
			Q1005	405 015 8704	TR 2SC2812-L6-TA

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q1006	405 015 8704	TR 2SC2812-L6-TA		405 041 6705	TR 2SC2621-E-RA
Q1007	405 015 8704	TR 2SC2812-L6-TA		405 066 9903	TR 2SC2688(1)-K
INTEGRATED CIRCUIT				405 067 0008	TR 2SC2688(1)-L
IC1001	409 299 5701	IC SAA5244AP	Q611	405 067 0107	TR 2SC2688(1)-M
IC1002	409 018 7603	IC LA7016		405 041 6507	TR 2SC2621-D-RA
				405 041 6705	TR 2SC2621-E-RA
				405 066 9903	TR 2SC2688(1)-K
				405 067 0008	TR 2SC2688(1)-L
CAPACITOR				405 067 0107	TR 2SC2688(1)-M
C1001	403 166 6808	MT-POLYEST 0.1U J 63V	Q621	405 041 6507	TR 2SC2621-D-RA
	403 243 6806	MT-COMPO 0.1U J 50V		405 041 6705	TR 2SC2621-E-RA
C1002	403 248 1608	ELECT 47U M 16V		405 066 9903	TR 2SC2688(1)-K
C1003	403 166 6808	MT-POLYEST 0.1U J 63V		405 067 0008	TR 2SC2688(1)-L
	403 243 6806	MT-COMPO 0.1U J 50V		405 067 0107	TR 2SC2688(1)-M
C1004	403 032 8608	CERAMIC 8P D 50V	Q640	406 000 6804	TR 2SA1015-GR(SAN)
C1005	403 012 6808	CERAMIC 15P J 50V		405 001 7407	TR 2SA1015-O(SAN)
C1006	403 056 8103	POLYESTER 1000P K 50V		405 001 7605	TR 2SA1015-Y(SAN)
	403 179 3900	POLYESTER 1000P K 50V		405 004 3109	TR 2SA564A-Q(CU)
C1007	403 166 6808	MT-POLYEST 0.1U J 63V		405 004 3208	TR 2SA564A-R(CU)
	403 243 6806	MT-COMPO 0.1U J 50V		405 004 4205	TR 2SA608-E-CTV-NP
C1008	403 166 6808	MT-POLYEST 0.1U J 63V		405 004 4809	TR 2SA608-F-CTV-NP
	403 243 6806	MT-COMPO 0.1U J 50V		405 006 1103	TR 2SA933-Q
C1009	403 166 6808	MT-POLYEST 0.1U J 63V		405 006 1202	TR 2SA933-R
	403 243 6806	MT-COMPO 0.1U J 50V		405 006 1707	TR 2SA933S-Q
C1010	403 166 6808	MT-POLYEST 0.1U J 63V		405 006 1806	TR 2SA933S-R
	403 243 6806	MT-COMPO 0.1U J 50V			
C1020	403 248 1905	ELECT 10U M 16V			
C1021	403 248 1905	ELECT 10U M 16V			
C1025	403 069 9500	CERAMIC 0.01U Z 50V			
RESISTOR			CAPACITOR		
R1001	401 038 2200	MT-GLAZE 27K JA 1/10W	C601	403 072 7708	CERAMIC 330P K 50V
R1002	401 038 7809	MT-GLAZE 56K JA 1/10W	C611	403 072 7708	CERAMIC 330P K 50V
R1003	401 038 3603	MT-GLAZE 3.3K JA 1/10W	C621	403 072 7708	CERAMIC 330P K 50V
R1005	401 038 7502	MT-GLAZE 56 JA 1/10W	C631	403 077 2708	CERAMIC 1000P P 2K
R1008	401 038 9506	MT-GLAZE 75 JA 1/10W	RESISTOR		
R1011	401 038 9506	MT-GLAZE 75 JA 1/10W	R601	401 018 2800	CARBON 330 JA 1/4W
R1012	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R602	401 018 3807	CARBON 3.3K JA 1/4W
R1013	401 037 5400	MT-GLAZE 1K JA 1/10W	R603	401 012 5708	CARBON 1K JA 1/4W
R1014	401 038 3603	MT-GLAZE 3.3K JA 1/10W	R604	401 065 4604	OXIDE-MT 12K JA 2W
R1015	401 038 9308	MT-GLAZE 68K JA 1/10W	R605	401 002 0102	SOLID 3.3K KA 1/2W
R1016	401 038 5003	MT-GLAZE 390 JA 1/10W	R611	401 018 2800	CARBON 330 JA 1/4W
R1018	401 037 5608	MT-GLAZE 10K JA 1/10W	R612	401 018 3807	CARBON 3.3K JA 1/4W
R1020	401 037 5202	MT-GLAZE 100 JA 1/10W	R613	401 016 3809	CARBON 2.2K JA 1/4W
R1021	401 037 5202	MT-GLAZE 100 JA 1/10W	R614	401 065 4604	OXIDE-MT 12K JA 2W
R1022	401 037 5202	MT-GLAZE 100 JA 1/10W	R615	401 002 0102	SOLID 3.3K KA 1/2W
R1023	401 038 6307	MT-GLAZE 470 JA 1/10W	R621	401 018 2800	CARBON 330 JA 1/4W
R1024	401 038 6307	MT-GLAZE 470 JA 1/10W	R622	401 018 3807	CARBON 3.3K JA 1/4W
R1025	401 037 5400	MT-GLAZE 1K JA 1/10W	R623	401 015 2704	CARBON 1.8K JA 1/4W
R1026	401 037 5400	MT-GLAZE 1K JA 1/10W	R624	401 065 4604	OXIDE-MT 12K JA 2W
R1027	401 037 5608	MT-GLAZE 10K JA 1/10W	R625	401 002 0102	SOLID 3.3K KA 1/2W
R1029	401 038 0800	MT-GLAZE 22K JA 1/10W	R627	401 020 0801	CARBON 470 JA 1/4W
R1030	401 038 0800	MT-GLAZE 22K JA 1/10W	R631	401 001 7607	SOLID 270K KA 1/2W
R1031	401 038 2200	MT-GLAZE 27K JA 1/10W	R641	401 020 2003	CARBON 4.7K JA 1/4W
COIL			R642	401 018 3807	CARBON 3.3K JA 1/4W
L1002	610 252 0170	PEAKING COIL 3.3UHK	R644	401 019 1000	CARBON 390 JA 1/4W
DIODE			R651	401 057 4704	OXIDE-MT 0.39 JA 1W
D1001	407 048 1103	ZENER DIODE EQA02-05D	VARIABLE RESISTOR		
MISCELLANEOUS			VR601	645 003 4121	VR, SEMI, 4.7K S
X1001	610 249 6024	CRYSTAL OSCILLATOR	VR602	645 002 1916	VR, SEMI, 1K S
K10C	610 221 7506	PLUG 6P	VR611	645 003 4121	VR, SEMI, 4.7K S
K10D	610 221 7513	PLUG 8P	VR612	645 002 1916	VR, SEMI, 1K S
			VR621	645 003 4121	VR, SEMI, 4.7K S
610 248 9293 ASSY, PWB, CRT E7PC 1AA0B10E008A0			COIL		
TRANSISTER			L601	610 029 6268	PEAKING COIL 330UH K
Q601	405 041 6507	TR 2SC2621-D-RA	L611	610 029 6268	PEAKING COIL 330UH K
			L621	610 029 6268	PEAKING COIL 330UH K
			MISCELLANEOUS		
			K601	610 233 7990	CRT SOCKET

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
OUT OF CIRCUIT BOARD			Parts List for CB5949 (C25EG25NB-00)		
PICTURE TUBE			610 248 9231 ASSY, PWB, MAIN E7LC		
COIL			1AA0B10E00200		
<u>A</u> Q901	414 001 3500	CRT A51JRU40X02 (MW)	TRANSISTOR		
<u>A</u> L901	645 002 5624	COIL,DEGAUSSING	Q101	405 013 3305	TR 2SC2216 (SAN)
	645 002 5631	COIL,DEGAUSSING	Q102	405 016 6204	TR 2SC3000-D
MISCELLANEOUS				405 016 6402	TR 2SC3000-E
KDY	610 013 9596	MINI CONNECTOR 5P-SOCKET		405 016 6600	TR 2SC3000-F
SP901	610 232 3986	SPEAKER	Q122	406 007 2106	TR JC546A
	610 228 7202	SPEAKER		406 007 2007	TR JC546B
SP902	610 232 3986	SPEAKER		405 019 1909	TR 2SC536-E-NP
	610 228 7202	SPEAKER		405 019 2708	TR 2SC536-F-NP
<u>A</u> W901	645 000 2458	CORD, POWER		405 019 3804	TR 2SC536-G-NP
W902	610 251 5824	ASSY,WIRE GND CONNECTOR E	Q124	406 007 1901	TR JC556A
				406 007 1802	TR JC556B
				405 004 4205	TR 2SA608-E-CTV-NP
				405 004 4809	TR 2SA608-F-CTV-NP
				405 028 7909	TR 2SA608-G-CTV-NP
			Q160	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q171	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q202	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q203	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q311	406 007 1901	TR JC556A
				406 007 1802	TR JC556B
				405 004 4205	TR 2SA608-E-CTV-NP
				405 004 4809	TR 2SA608-F-CTV-NP
				405 028 7909	TR 2SA608-G-CTV-NP
			Q312	405 058 0208	TR 2SC3807-R-CTV-YA
			Q313	405 018 9203	TR 2SC3895-T-CTV-YB
			Q353	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q381	405 014 8408	TR 2SC2568(1)-K
				405 014 8507	TR 2SC2568(1)-L
				405 041 6507	TR 2SC2621-D-RA
				405 041 6705	TR 2SC2621-E-RA
			Q431	405 018 0507	TR 2SC3332-R
				405 018 0606	TR 2SC3332-S
			Q432	405 095 0209	TR 2SD1556-3E
			Q434	406 007 2106	TR JC546A
				406 007 2007	TR JC546B
				405 019 1909	TR 2SC536-E-NP
				405 019 2708	TR 2SC536-F-NP
				405 019 3804	TR 2SC536-G-NP
			Q443	406 007 1901	TR JC556A
				406 007 1802	TR JC556B
				405 004 4205	TR 2SA608-E-CTV-NP
				405 004 4809	TR 2SA608-F-CTV-NP
				405 028 7909	TR 2SA608-G-CTV-NP
			Q461	405 064 7307	TR 2SB1274-Q-RA
				405 064 7406	TR 2SB1274-R-RA

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q462	405 064 7505	TR 2SB1274-S-RA	Q804	406 007 2106	TR JC546A
	406 007 2106	TR JC546A		406 007 2007	TR JC546B
	406 007 2007	TR JC546B		405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
Q700	405 019 2708	TR 2SC536-F-NP	Q805	405 019 3804	TR 2SC536-G-NP
	405 019 3804	TR 2SC536-G-NP		406 007 2106	TR JC546A
	406 007 1901	TR JC556A		406 007 2007	TR JC546B
	406 007 1802	TR JC556B		405 019 1909	TR 2SC536-E-NP
Q702	405 004 4205	TR 2SA608-E-CTV-NP	Q806	405 019 2708	TR 2SC536-F-NP
	405 004 4809	TR 2SA608-F-CTV-NP		405 019 3804	TR 2SC536-G-NP
	405 028 7909	TR 2SA608-G-CTV-NP		406 007 2106	TR JC546A
	406 007 2106	TR JC546A		406 007 2007	TR JC546B
Q703	406 007 2007	TR JC546B	Q808	405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
	405 019 2708	TR 2SC536-F-NP		405 019 3804	TR 2SC536-G-NP
	405 019 3804	TR 2SC536-G-NP	Q809	406 007 2106	TR JC546A
Q704	406 007 2106	TR JC546A		406 007 2007	TR JC546B
	406 007 2007	TR JC546B		405 019 1909	TR 2SC536-E-NP
	405 019 1909	TR 2SC536-E-NP		405 019 2708	TR 2SC536-F-NP
Q708	405 019 2708	TR 2SC536-F-NP	Q810	405 019 3804	TR 2SC536-G-NP
	405 019 3804	TR 2SC536-G-NP		406 007 2106	TR JC546A
	406 007 1901	TR JC556A		406 007 2007	TR JC546B
	406 007 1802	TR JC556B		405 019 1909	TR 2SC536-E-NP
Q711	405 004 4205	TR 2SA608-E-CTV-NP	INTEGRATED CIRCUIT		
	405 004 4809	TR 2SA608-F-CTV-NP	IC101	409 309 6209	IC TDA8361/N3
	405 028 7909	TR 2SA608-G-CTV-NP	IC171	409 301 4906	IC TDA7263M
	405 118 4207	TR PH2369	IC191	409 026 8609	IC L78M05-RA
Q714	406 007 2106	TR JC546A	IC270	409 291 0605	IC TDA4661/V2
	406 007 2007	TR JC546B		409 322 0505	IC TDA4662/V1
	405 019 1909	TR 2SC536-E-NP	IC351	409 143 3402	IC AN78M12-LB
	405 019 2708	TR 2SC536-F-NP		409 026 9507	IC L78M12-RA
Q721	405 019 3804	TR 2SC536-G-NP	IC352	409 285 5203	IC L78M08-RA
	406 007 2106	TR JC546A	IC451	409 192 5709	IC LA7833
	406 007 2007	TR JC546B	IC701	410 178 3503	IC M37210M3-620SP
	405 019 1909	TR 2SC536-E-NP	IC790	409 247 7702	IC ST24C02AB1
Q722	405 019 2708	TR 2SC536-F-NP		409 257 7204	IC X24C02P
	405 019 3804	TR 2SC536-G-NP		409 281 8307	IC 24C02A/P
	406 007 2106	TR JC546A	CAPACITOR		
	406 007 2007	TR JC546B	C105	403 248 1400	ELECT 1U M 50V
Q781	405 019 1909	TR 2SC536-E-NP	C108	403 011 3808	CERAMIC 120P J 50V
	405 019 2708	TR 2SC536-F-NP	C109	403 009 3407	CERAMIC 100P J 50V
	405 019 3804	TR 2SC536-G-NP	C110	403 024 0009	CERAMIC 39P J 50V
	406 007 2106	TR JC546A	C113	403 069 8305	CERAMIC 0.01U Z 50V
Q800	406 007 2007	TR JC546B	C114	403 069 8305	CERAMIC 0.01U Z 50V
	405 019 1909	TR 2SC536-E-NP	C115	403 069 8305	CERAMIC 0.01U Z 50V
	405 019 2708	TR 2SC536-F-NP	C117	403 248 1608	ELECT 47U M 16V
	405 019 3804	TR 2SC536-G-NP	C121	403 270 2901	MT-POLYEST 0.1U K 63V
Q801	406 007 2106	TR JC546A		403 243 6806	MT-COMPO 0.1U J 50V
	406 007 2007	TR JC546B	C122	403 270 2901	MT-POLYEST 0.1U K 63V
	405 019 1909	TR 2SC536-E-NP		403 243 6806	MT-COMPO 0.1U J 50V
	405 019 2708	TR 2SC536-F-NP	C127	403 069 0507	CERAMIC 1000P K 50V
Q802	405 019 3804	TR 2SC536-G-NP	C128	403 050 0509	ELECT 2.2U M 50V
	406 007 2106	TR JC546A	C129	403 028 2009	CERAMIC 56P J 50V
	406 007 2007	TR JC546B	C130	403 069 8305	CERAMIC 0.01U Z 50V
	405 019 1909	TR 2SC536-E-NP	C131	403 248 1608	ELECT 47U M 16V
Q803	405 019 2708	TR 2SC536-F-NP	C132	403 270 2901	MT-POLYEST 0.1U K 63V
	405 019 3804	TR 2SC536-G-NP		403 243 6806	MT-COMPO 0.1U J 50V
	406 007 1901	TR JC556A	C133	403 024 9705	CERAMIC 4P C 50V
	406 007 1802	TR JC556B	C135	403 270 2901	MT-POLYEST 0.1U K 63V
	405 004 4205	TR 2SA608-E-CTV-NP		403 243 6806	MT-COMPO 0.1U J 50V
	405 004 4809	TR 2SA608-F-CTV-NP	C136	403 194 4609	ELECT 470U M 16V
	405 028 7909	TR 2SA608-G-CTV-NP	C137	403 069 8305	CERAMIC 0.01U Z 50V
			C138	403 049 0800	ELECT 1U M 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C160	403 056 9704	POLYESTER 0.01U J 50V		403 243 6806	MT-COMPO 0.1U J 50V
	403 178 9309	POLYESTER 0.01U J 50V	C315	403 058 2604	POLYESTER 0.015U J 50V
C170	403 069 8305	CERAMIC 0.01U Z 50V		403 179 3207	POLYESTER 0.015U J 50V
C171	403 070 4610	CERAMIC 1200P K 50V	C316	403 165 8407	CERAMIC 680P K 2K
C172	403 070 4610	CERAMIC 1200P K 50V		403 186 1104	CERAMIC 680P K 2K
C173	403 270 3601	MT-POLYEST 0.33U K 63V	C317	403 059 6205	POLYESTER 0.022U K 50V
	403 256 4608	MT-COMPO 0.33U J 50V		403 179 2408	POLYESTER 0.022U K 50V
C174	403 270 3601	MT-POLYEST 0.33U K 63V	<u>A</u> C331	404 060 6505	CERAMIC 2200P M 400V
	403 256 4608	MT-COMPO 0.33U J 50V		404 060 6604	CERAMIC 2200P M 400V
C175	403 258 3609	ELECT 33U M 25V	C351	403 165 9305	CERAMIC 680P K 1K
C176	403 258 3609	ELECT 33U M 25V		403 185 9101	CERAMIC 680P K 1K
C177	403 270 3403	MT-POLYEST 0.22U K 63V	C352	403 165 8605	CERAMIC 470P K 2K
	403 263 5704	MT-COMPO 0.22U J 50V		403 186 1302	CERAMIC 470P K 2K
C178	403 270 3403	MT-POLYEST 0.22U K 63V	C354	403 186 3108	CERAMIC 390P K 1K
	403 263 5704	MT-COMPO 0.22U J 50V	C361	404 055 9801	ELECT 220U M 200V
C179	403 196 0203	ELECT 2200U M 35V	C362	403 281 1108	ELECT 22U M 250V
C180	403 270 3403	MT-POLYEST 0.22U K 63V	C363	403 210 5504	ELECT 470U M 35V
	403 263 5704	MT-COMPO 0.22U J 50V	C364	403 148 0404	ELECT 1000U M 25V
C181	403 270 3403	MT-POLYEST 0.22U K 63V	C365	403 158 1309	ELECT 2200U M 35V
	403 263 5704	MT-COMPO 0.22U J 50V	C371	403 194 4609	ELECT 470U M 16V
C182	403 196 0203	ELECT 2200U M 35V	C372	403 194 4609	ELECT 470U M 16V
C183	403 196 0203	ELECT 2200U M 35V	C382	403 210 5504	ELECT 470U M 35V
C188	403 248 2001	ELECT 4.7U M 25V	C383	403 160 0000	ELECT 470U M 10V
C189	403 248 1608	ELECT 47U M 16V	C400	403 014 0200	CERAMIC 18P J 50V
C191	403 258 3401	ELECT 10U M 25V	C401	403 270 2901	MT-POLYEST 0.1U K 63V
C192	403 258 3401	ELECT 10U M 25V		403 243 6806	MT-COMPO 0.1U J 50V
C193	403 244 1206	ELECT 100U M 10V	C402	403 270 3809	MT-POLYEST 0.047U K 63V
C202	403 270 2901	MT-POLYEST 0.1U K 63V		403 256 1102	MT-COMPO 0.047U J 50V
	403 243 6806	MT-COMPO 0.1U J 50V	C403	403 061 8303	POLYESTER 4700P K 50V
C203	403 061 8303	POLYESTER 4700P K 50V		403 179 1104	POLYESTER 4700P K 50V
	403 179 1104	POLYESTER 4700P K 50V	C404	403 086 2300	NP-ELECT 1U M 50V
C204	403 270 2901	MT-POLYEST 0.1U K 63V	C405	403 060 0704	POLYESTER 2700P K 50V
	403 243 6806	MT-COMPO 0.1U J 50V		403 179 2200	POLYESTER 2700P K 50V
C205	403 270 2901	MT-POLYEST 0.1U K 63V	C406	403 059 6205	POLYESTER 0.022U K 50V
	403 243 6806	MT-COMPO 0.1U J 50V		403 179 2408	POLYESTER 0.022U K 50V
C206	403 270 3809	MT-POLYEST 0.047U K 63V	C407	403 233 0302	ELECT 100U M 16V
	403 256 1102	MT-COMPO 0.047U J 50V	C420	404 060 7908	MT-POLYPRO 6000P J 1.5K
C207	403 248 2803	ELECT 2.2U M 50V	C421	403 218 3106	ELECT 1000U M 16V
C208	403 270 2901	MT-POLYEST 0.1U K 63V	C422	403 082 6906	POLYPRO 0.12U J 200V
	403 243 6806	MT-COMPO 0.1U J 50V	C423	404 046 9001	MT-POLYPRO 5100P J 1.5K
C209	403 270 2901	MT-POLYEST 0.1U K 63V	C424	403 083 4901	POLYPRO 0.027U J 400V
	403 243 6806	MT-COMPO 0.1U J 50V	C425	403 083 4307	POLYPRO 0.022U J 400V
C210	403 270 2901	MT-POLYEST 0.1U K 63V	C426	403 066 6106	MT-POLYEST 0.47U J 250V
	403 243 6806	MT-COMPO 0.1U J 50V	C427	403 165 6700	CERAMIC 680P K 3K
C211	403 248 2803	ELECT 2.2U M 50V		403 185 9408	CERAMIC 680P K 3K
C212	403 248 2803	ELECT 2.2U M 50V	C431	403 270 4004	MT-POLYEST 0.056U K 63V
C213	403 057 0601	POLYESTER 0.01U K 50V		403 246 2102	MT-COMPO 0.056U J 50V
	403 179 3801	POLYESTER 0.01U K 50V	C432	403 075 7101	CERAMIC 1000P K 500V
C215	403 270 3908	MT-POLYEST 0.47U K 63V	C433	403 076 3102	CERAMIC 3900P K 500V
	403 264 2207	MT-COMPO 0.47U J 50V	C434	403 229 1207	ELECT 47U M 35V
C216	403 270 2901	MT-POLYEST 0.1U K 63V	C441	403 082 8009	POLYPRO 0.2U J 200V
	403 243 6806	MT-COMPO 0.1U J 50V	C442	403 082 6906	POLYPRO 0.12U J 200V
C221	403 270 2901	MT-POLYEST 0.1U K 63V	C443	403 201 5001	ELECT 330U M 16V
	403 243 6806	MT-COMPO 0.1U J 50V	C444	403 259 8801	ELECT 0.47U M 160V
C231	403 194 2100	NP-ELECT 4.7U M 100V	C451	403 148 2002	ELECT 470U M 35V
C232	403 138 1602	ELECT 1U M 100V	C452	403 217 1103	ELECT 220U M 35V
C233	403 075 8009	CERAMIC 0.01U K 500V	C453	403 023 9706	CERAMIC 39P J 50V
C270	403 059 6205	POLYESTER 0.022U K 50V	C454	403 069 8305	CERAMIC 0.01U Z 50V
	403 179 2408	POLYESTER 0.022U K 50V	C455	403 075 7101	CERAMIC 1000P K 500V
C271	403 069 0507	CERAMIC 1000P K 50V	C456	403 233 0807	ELECT 10U M 50V
C272	403 069 0507	CERAMIC 1000P K 50V	C458	403 233 0807	ELECT 10U M 50V
C275	403 248 1905	ELECT 10U M 16V	C459	403 065 9801	MT-POLYEST 0.22U K 100V
C301	404 047 3602	MT-POLYEST 0.1U M 125V	C461	403 155 1203	ELECT 3300U M 25V
	404 044 0901	MT-COMPO 0.1U M 250V	C462	403 049 0008	ELECT 1U M 50V
C302	404 047 3602	MT-POLYEST 0.1U M 125V	C463	403 102 8408	MT-POLYEST 0.1U K 100V
	404 044 0901	MT-COMPO 0.1U M 250V	C464	403 257 0807	ELECT 0.47U M 50V
C303	403 076 7100	CERAMIC 1000P M 1K	C465	403 066 0104	MT-POLYEST 2.2U K 100V
C304	403 076 7100	CERAMIC 1000P M 1K	C466	403 270 2901	MT-POLYEST 0.1U K 63V
C305	403 076 7100	CERAMIC 1000P M 1K		403 243 6806	MT-COMPO 0.1U J 50V
C306	403 076 7100	CERAMIC 1000P M 1K	C467	403 241 3807	ELECT 220U M 10V
C307	404 047 1608	ELECT 270U M 400V	C468	403 258 3500	ELECT 22U M 25V
C314	403 270 2901	MT-POLYEST 0.1U K 63V	C469	403 233 0807	ELECT 10U M 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C470	403 069 8305	CERAMIC 0.01U Z 50V	R181	401 024 7400	CARBON 10K JA 1/6W
C700	403 068 9006	CERAMIC 100P K 50V	R182	401 024 7400	CARBON 10K JA 1/6W
C701	403 248 2001	ELECT 4.7U M 25V	R189	401 024 7400	CARBON 10K JA 1/6W
C704	403 068 9006	CERAMIC 100P K 50V	R190	401 066 9004	OXIDE-MT 27 JA 2W
C705	403 068 9006	CERAMIC 100P K 50V	R191	407 148 0105	ZENER DIODE EQA02-05A
C706	403 068 9006	CERAMIC 100P K 50V	R202	401 024 7707	CARBON 100K JA 1/6W
C707	403 270 3403	MT-POLYEST 0.22U K 63V	R203	401 012 4503	CARBON 100 JA 1/4W
	403 263 5704	MT-COMPO 0.22U J 50V	R204	401 012 4503	CARBON 100 JA 1/4W
C708	403 270 3403	MT-POLYEST 0.22U K 63V	R205	401 012 4503	CARBON 100 JA 1/4W
	403 263 5704	MT-COMPO 0.22U J 50V	R206	401 024 6700	CARBON 100 JA 1/6W
C710	403 068 9006	CERAMIC 100P K 50V	R207	401 024 6700	CARBON 100 JA 1/6W
C711	403 248 2001	ELECT 4.7U M 25V	R208	401 024 6700	CARBON 100 JA 1/6W
C712	403 248 1400	ELECT 1U M 50V	R209	401 022 3107	CARBON 6.8K JA 1/4W
C713	403 248 1400	ELECT 1U M 50V	R210	401 025 1902	CARBON 15K JA 1/6W
C716	403 233 1507	ELECT 4.7U M 50V	R212	401 025 4200	CARBON 1.8K JA 1/6W
C717	403 068 9006	CERAMIC 100P K 50V	R213	401 016 4806	CARBON 22K JA 1/4W
C718	403 069 8305	CERAMIC 0.01U Z 50V	R215	401 025 4200	CARBON 1.8K JA 1/6W
C719	403 069 0507	CERAMIC 1000P K 50V	R216	401 012 7009	CARBON 10K JA 1/4W
C721	403 270 2901	MT-POLYEST 0.1U K 63V	R219	401 019 1000	CARBON 390 JA 1/4W
	403 243 6806	MT-COMPO 0.1U J 50V	R220	401 027 5007	CARBON 68 JA 1/6W
C722	403 248 1608	ELECT 47U M 16V	R221	401 024 6700	CARBON 100 JA 1/6W
C723	403 026 0700	CERAMIC 47P J 50V	R231	401 014 6109	CARBON 150K JA 1/4W
C724	403 026 0700	CERAMIC 47P J 50V	R232	401 012 5708	CARBON 1K JA 1/4W
C727	403 270 2901	MT-POLYEST 0.1U K 63V	R233	401 000 7509	SOLID 1.5K KA 1/2W
	403 243 6806	MT-COMPO 0.1U J 50V	R234	401 024 7400	CARBON 10K JA 1/6W
C729	403 248 1905	ELECT 10U M 16V	R235	401 026 7408	CARBON 39K JA 1/6W
C744	403 068 9006	CERAMIC 100P K 50V	R275	401 025 7409	CARBON 220 JA 1/6W
C802	403 248 1905	ELECT 10U M 16V	R301	401 008 8607	CARBON 220K JA 1/2W
C805	403 248 1905	ELECT 10U M 16V	R302	402 067 7709	WIRE WOUND 3.9 KA 7W
C811	403 248 1905	ELECT 10U M 16V	R311	401 027 2600	CARBON 5.6K JA 1/6W
C814	403 248 1905	ELECT 10U M 16V	R315	401 025 8208	CARBON 22K JA 1/6W
C817	403 270 3908	MT-POLYEST 0.47U K 63V	R317	401 024 7004	CARBON 1K JA 1/6W
	403 264 2207	MT-COMPO 0.47U J 50V	R319	401 016 1508	CARBON 22 JA 1/4W
C818	403 248 1905	ELECT 10U M 16V	R320	401 007 5805	CARBON 120K JA 1/2W
C821	403 258 3401	ELECT 10U M 25V	R321	401 007 5805	CARBON 120K JA 1/2W
C822	403 044 7309	ELECT 10U M 25V	R322	401 014 5201	CARBON 15K JA 1/4W
RESISTOR			R323	401 026 1000	CARBON 2.7K JA 1/6W
R101	401 025 7805	CARBON 2.2K JA 1/6W	R324	401 068 2607	OXIDE-MT 47 JA 2W
R103	401 012 4503	CARBON 100 JA 1/4W	R325	401 067 8204	OXIDE-MT 39 JA 2W
R104	401 027 2600	CARBON 5.6K JA 1/6W	R326	401 017 1507	CARBON 2.7K GA 1/4W
R105	401 024 7004	CARBON 1K JA 1/6W	<u>A</u> R331	402 000 8305	SOLID 5.6M KA 1/2W
R106	401 025 7409	CARBON 220 JA 1/6W	<u>A</u> R332	402 000 8305	SOLID 5.6M KA 1/2W
R107	401 026 0409	CARBON 27 JA 1/6W	R352	401 014 6109	CARBON 150K JA 1/4W
R108	401 026 3905	CARBON 330 JA 1/6W	R353	401 027 4307	CARBON 6.2K JA 1/6W
R121	401 027 0309	CARBON 47K JA 1/6W	R354	401 015 4708	CARBON 180K JA 1/4W
R122	401 025 8703	CARBON 220K JA 1/6W	R355	401 011 2708	CARBON 68K JA 1/2W
R123	401 025 8703	CARBON 220K JA 1/6W	R356	401 025 8208	CARBON 22K JA 1/6W
R124	401 027 5502	CARBON 6.8K JA 1/6W	R362	402 067 8904	WIRE WOUND 3.9 KA 5W
R126	401 027 2600	CARBON 5.6K JA 1/6W	R363	401 065 5809	OXIDE-MT 15 JA 2W
R127	401 024 6700	CARBON 100 JA 1/6W	R364	401 069 0305	OXIDE-MT 6.8 JA 2W
R131	401 022 3107	CARBON 6.8K JA 1/4W	R368	401 066 9004	OXIDE-MT 27 JA 2W
R132	401 020 2904	CARBON 47K JA 1/4W	R382	401 026 4308	CARBON 3.3K JA 1/6W
R133	401 015 1608	CARBON 180 JA 1/4W	R385	401 025 7409	CARBON 220 JA 1/6W
R134	401 012 5708	CARBON 1K JA 1/4W	R393	401 024 9701	CARBON 12K JA 1/6W
R135	401 027 2303	CARBON 560 JA 1/6W	R394	401 026 7606	CARBON 390K JA 1/6W
R136	401 027 0309	CARBON 47K JA 1/6W	R400	401 027 0309	CARBON 47K JA 1/6W
R138	401 025 1308	CARBON 150 JA 1/6W	R401	401 024 6700	CARBON 100 JA 1/6W
R160	401 027 0309	CARBON 47K JA 1/6W	R402	401 027 6103	CARBON 680K JA 1/6W
R161	401 026 1000	CARBON 2.7K JA 1/6W	R403	401 012 4503	CARBON 100 JA 1/4W
R162	401 026 4605	CARBON 33K JA 1/6W	R404	401 025 8208	CARBON 22K JA 1/6W
R163	401 026 9907	CARBON 4.7K JA 1/6W	R405	401 024 6700	CARBON 100 JA 1/6W
R171	401 019 9600	CARBON 47 JA 1/4W	R406	401 026 7606	CARBON 390K JA 1/6W
R172	401 010 1504	CARBON 4.7 JA 1/2W	R407	401 025 8208	CARBON 22K JA 1/6W
R173	401 014 4105	CARBON 1.5K JA 1/4W	R408	401 012 4503	CARBON 100 JA 1/4W
R174	401 010 1504	CARBON 4.7 JA 1/2W	R409	401 026 9907	CARBON 4.7K JA 1/6W
R175	401 019 9600	CARBON 47 JA 1/4W	R410	401 025 8208	CARBON 22K JA 1/6W
R176	401 014 4105	CARBON 1.5K JA 1/4W	R420	401 024 7400	CARBON 10K JA 1/6W
R177	401 024 9701	CARBON 12K JA 1/6W	R422A	402 067 8805	WIRE WOUND 10 KA 5W
R178	401 025 7805	CARBON 2.2K JA 1/6W	R432	401 024 7004	CARBON 1K JA 1/6W
R179	401 024 9701	CARBON 12K JA 1/6W	R433	401 007 1104	CARBON 1K JA 1/2W
R180	401 024 7400	CARBON 10K JA 1/6W	R434	401 067 9201	OXIDE-MT 390 JA 2W
			R436	401 014 5201	CARBON 15K JA 1/4W

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Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
COIL			D319	407 048 3206	ZENER DIODE EQA02-07A
L103	610 031 3958	PEAKING COIL		407 048 3404	ZENER DIODE EQA02-07B
L125	610 031 4290	PEAKING COIL 8.2UHK	D351	407 007 7702	DIODE EU2A
L301A	610 221 6912	LINE FILTER	D352	407 007 7504	DIODE EU1C
L420	610 031 1039	INDUCTOR	D353	407 007 7603	DIODE EU2
L431	610 032 4367	FILTER COIL		407 007 7801	DIODE EU2Z
L441	610 000 0858	LINEARITY COIL	D354	407 106 2806	DIODE RU3YX
	610 000 0872	LINEARITY COIL	D355	407 103 1604	DIODE RU4YX LF-J3
L442	610 000 0070	COIL	D361	407 048 2407	ZENER DIODE EQA02-06E
L451	610 031 3354	PEAKING COIL		407 048 2605	ZENER DIODE EQA02-06F
	610 210 3908	PEAKING COIL 33UHK	D381	407 048 2001	ZENER DIODE EQA02-06B
L452	610 032 1243	INDUCTOR 150UHK	D384	407 005 4505	DIODE DS442X
	610 032 1250	INDUCTOR 150UHK		407 013 1008	DIODE 1S1553
L461	610 031 1367	INDUCTOR 202J		407 013 4306	DIODE 1S2076A
L462	610 000 0261	COIL		407 013 6508	DIODE 1S2471
	610 208 3781	COIL	D391	408 007 8607	DIODE 1N4148
L702	610 031 4214	PEAKING COIL		407 013 1206	DIODE 1S1555
L703	610 031 4214	PEAKING COIL	D392	408 007 8607	DIODE 1N4148
L704	610 031 4030	PEAKING COIL		407 013 1206	DIODE 1S1555
L705	610 029 6725	PEAKING COIL 1.5UH M	D393	407 012 4406	DIODE 1SS133
L706	610 031 3873	PEAKING COIL 10UHK		407 012 5809	DIODE 1SS176
DIODE			D401	407 075 9905	ZENER DIODE EQA03-11A
D130	407 075 9905	ZENER DIODE EQA03-11A	D431	407 048 4906	ZENER DIODE EQA02-09A
D189	407 012 4406	DIODE 1SS133		407 048 5101	ZENER DIODE EQA02-09B
	407 012 5809	DIODE 1SS176	D432	407 007 6606	DIODE ES1
D190	407 148 0105	ZENER DIODE EQA02-05A	D433	407 012 4406	DIODE 1SS133
	407 148 0204	ZENER DIODE EQA02-05B		407 012 5809	DIODE 1SS176
D191	408 007 8607	DIODE 1N4148	D434	407 005 7308	DIODE EM01Z
	407 013 1206	DIODE 1S1555	D438	407 095 8001	DIODE ERD07-15L
D201	407 075 9905	ZENER DIODE EQA03-11A	D439	407 006 4108	DIODE ERB44-04
D202	407 075 9905	ZENER DIODE EQA03-11A	D440	407 012 4406	DIODE 1SS133
D203	407 075 9905	ZENER DIODE EQA03-11A		407 012 5809	DIODE 1SS176
D210	407 012 4406	DIODE 1SS133	D441	407 012 4406	DIODE 1SS133
	407 012 5809	DIODE 1SS176		407 012 5809	DIODE 1SS176
D231	407 005 4505	DIODE DS442X	D442	407 012 4406	DIODE 1SS133
	407 013 1008	DIODE 1S1553		407 012 5809	DIODE 1SS176
	407 013 4306	DIODE 1S2076A	D443	407 012 4406	DIODE 1SS133
	407 013 6508	DIODE 1S2471		407 012 5809	DIODE 1SS176
D232	408 007 8607	DIODE 1N4148	D446	407 012 4406	DIODE 1SS133
	407 013 1206	DIODE 1S1555		407 012 5809	DIODE 1SS176
D275	407 048 1202	ZENER DIODE EQA02-05E	D451	407 005 7308	DIODE EM01Z
D302	407 005 7308	DIODE EM01Z		408 009 9008	DIODE BYD33D
D303	407 006 6300	DIODE ERC05-10B	D452	408 007 8607	DIODE 1N4148
	407 009 6901	DIODE RM11C		407 013 1206	DIODE 1S1555
	407 064 6908	DIODE TVR4N(X)	D465	407 012 4406	DIODE 1SS133
D304	407 006 6300	DIODE ERC05-10B		407 012 5809	DIODE 1SS176
	407 009 6901	DIODE RM11C	D466	407 048 9000	ZENER DIODE EQA02-18A
	407 064 6908	DIODE TVR4N(X)	D467	407 005 4505	DIODE DS442X
D305	407 006 6300	DIODE ERC05-10B		407 013 1008	DIODE 1S1553
	407 009 6901	DIODE RM11C		407 013 4306	DIODE 1S2076A
	407 064 6908	DIODE TVR4N(X)		407 013 6508	DIODE 1S2471
D306	407 006 6300	DIODE ERC05-10B	D468	407 012 4406	DIODE 1SS133
	407 009 6901	DIODE RM11C		407 012 5809	DIODE 1SS176
	407 064 6908	DIODE TVR4N(X)	D469	407 007 7405	DIODE EU1
D314	407 005 4505	DIODE DS442X	D471	407 118 2207	ZENER DIODE 1275
	407 013 1008	DIODE 1S1553	D701	407 116 6504	LED SLP-181B-51
	407 013 4306	DIODE 1S2076A	D703	407 055 7907	ZENER DIODE RD3.6EL
	407 013 6508	DIODE 1S2471	D704	409 013 0104	IC HZT33
D315	407 105 8700	PHOTO COUPLE PC113B	D705	407 075 9905	ZENER DIODE EQA03-11A
	408 009 8407	PHOTO COUPLE CNY17F-3OPT6	D800	407 075 9905	ZENER DIODE EQA03-11A
D316	407 005 4505	DIODE DS442X	D801	407 075 9905	ZENER DIODE EQA03-11A
	407 013 1008	DIODE 1S1553	D803	407 075 9905	ZENER DIODE EQA03-11A
	407 013 4306	DIODE 1S2076A	D804	407 075 9905	ZENER DIODE EQA03-11A
	407 013 6508	DIODE 1S2471	D807	407 075 9905	ZENER DIODE EQA03-11A
D317	407 007 6606	DIODE ES1	D808	407 075 9905	ZENER DIODE EQA03-11A
	407 007 6903	DIODE ES1Z	D809	407 075 9905	ZENER DIODE EQA03-11A
	408 009 9008	DIODE BYD33D	D810	407 012 4406	DIODE 1SS133
D318	407 005 4505	DIODE DS442X		407 012 5809	DIODE 1SS176
	407 013 1008	DIODE 1S1553	D811	407 075 9905	ZENER DIODE EQA03-11A
	407 013 4306	DIODE 1S2076A	D812	407 075 9905	ZENER DIODE EQA03-11A
	407 013 6508	DIODE 1S2471	D813	407 075 9905	ZENER DIODE EQA03-11A
			D816	407 075 9905	ZENER DIODE EQA03-11A

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
MISCELLANEOUS					
<u>/A</u> F301	423 022 2102	FUSE 250V 4A			
A101	610 239 1145	UHF VARACTOR TUNER			
A701	610 224 5806	RC PREAMP 409-1L			
KA	610 221 7391	SOCKET 6P			
KB	610 221 7407	SOCKET 8P			
KC	610 221 7391	SOCKET 6P			
KD	610 221 7407	SOCKET 8P			
K801	610 234 3779	SOCKET 21P			
K801Z	610 081 9887	SOCKET MTG BRKT-D8PC			
<u>/A</u> PS301	408 013 3801	TH PTH451C262BF140M270			
SW220	610 011 2728	LEVER SWITCH			
<u>/A</u> SW301	645 003 6811	SWITCH,PUSH POWER 2P-2T			
SW451	610 011 2728	LEVER SWITCH			
SW701	610 011 2698	PUSH SWITCH			
SW702	610 011 2698	PUSH SWITCH			
SW703	610 011 2698	PUSH SWITCH			
SW704	610 011 2698	PUSH SWITCH			
SW705	610 011 2698	PUSH SWITCH			
SW706	610 011 2698	PUSH SWITCH			
X101	421 002 4702	SAW F TSF5322			
X124	610 015 2885	CERAMIC FILTER			
X400	610 249 5577	CRYSTAL OSCILLATOR			
X701	645 000 6692	OSC,CERAMIC 8.00MHZ			
	645 002 1039	OSC,CERAMIC 8.00MHZ			
610 248 9279 ASSY, PWB, TEXT&AUDIO E7PC					
1AA0B10E00600					
Same as Model C21EF25NB					
610 248 9293 ASSY, PWB, CRT E7PC					
1AA0B10E00800					
Same as Model C21EF25NB					
OUT OF CIRCUIT BOARD					
PICTURE TUBE					
<u>/A</u> Q901	414 007 1104	CRT A59ECY13X38			
COIL					
<u>/A</u> L901	645 003 0031	COIL,DEGAUSSING			
	645 003 0062	COIL,DEGAUSSING			
MISCELLANEOUS					
KDY	610 013 9626	MINI CONNECTOR 6P-SOCKET			
SP901	610 232 3986	SPEAKER			
	610 228 7202	SPEAKER			
SP902	610 232 3986	SPEAKER			
	610 228 7202	SPEAKER			
<u>/A</u> W901	645 000 2458	CORD, POWER			
W902	610 251 5831	ASSY,WIRE GND CONNECTOR E			

Q601	
VOLT.	WAVEFORM
B 2.0V	2.8Vp-p HORIZ.
C 143V	91Vp-p HORIZ.
E 1.5V	

Q611	
VOLT.	WAVEFORM
B 2.2V	3.4Vp-p HORIZ.
C 144V	100Vp-p HORIZ.
E 1.8V	

Q621	
VOLT.	WAVEFORM
B 2.1V	3.2Vp-p HORIZ.
C 145V	94Vp-p HORIZ.
E 1.7V	

Q640	
VOLT.	
B 0.9V	
C 0V	
E 1.5V	

MAIN PCB UNIT

IC701	
VOLT.	WAVEFORM
B 0.3V	52.0V
C 0.1V	51.0V
E 0.3V	50.0V
B 2.6V	49.0V
C 2.9V	48.0V
E 1.2V	47.0V
B 0.0V	46.0V
C 3.7V	45.0V
E 0.0V	44.0V
B 4.8V	43.0V
C 4.8V	42.0V
E 4.9V	41.0V
B 3.7V	40.0V
C 5.0V	39.0V
E 5.0V	38.0V
B 5.0V	37.0V
C 36.0V	36.0V
E 35.0V	35.0V
B 34.0V	34.0V
C 33.0V	33.0V
E 32.0V	32.0V
B 31.0V	31.0V
C 30.0V	30.0V
E 29.0V	29.0V
B 28.0V	28.0V
C 27.0V	27.0V
E 26.0V	26.0V

IC790	
VOLT.	WAVEFORM
B 0.0V	8.0V
C 0.0V	7.0V
E 0.0V	6.0V
B 0.0V	5.0V
C 0.0V	4.9V
E 0.0V	4.9V

IC451	
VOLT.	WAVEFORM
B 0.0V	12.1V
C 0.0V	23.5V
E 0.0V	0.8V
B 0.0V	0.8V
C 0.0V	23.3V
E 0.0V	1.5V

IC101	
VOLT.	WAVEFORM
B 3.0V	52.0V
C 5.9V	51.0V
E 8.0V	50.0V
B 8.0V	49.0V
C 8.0V	48.0V
E 3.9V	47.0V
B 3.2V	46.0V
C 1.7V	45.0V
E 0.0V	44.0V
B 8.0V	43.0V
C 0.0V	42.0V
E 3.2V	41.0V
B 4.2V	40.0V
C 2.5V	39.0V
E 3.4V	38.0V
B 0.1V	37.0V
C 3.6V	36.0V
E 2.5V	35.0V
B 2.5V	34.0V
C 2.5V	33.0V
E 0.2V	32.0V
B 3.4V	31.0V
C 3.4V	30.0V
E 3.4V	29.0V
B 2.3V	28.0V
C 2.1V	27.0V
E 2.1V	26.0V

IC270	
VOLT.	WAVEFORM
B 5.1V	16.0V
C 0.0V	15.0V
E 0.0V	14.0V
B 0.0V	13.0V
C 13.0V	12.0V
E 0.0V	11.0V
B 0.0V	10.0V
C 0.0V	9.0V
E 0.0V	8.0V

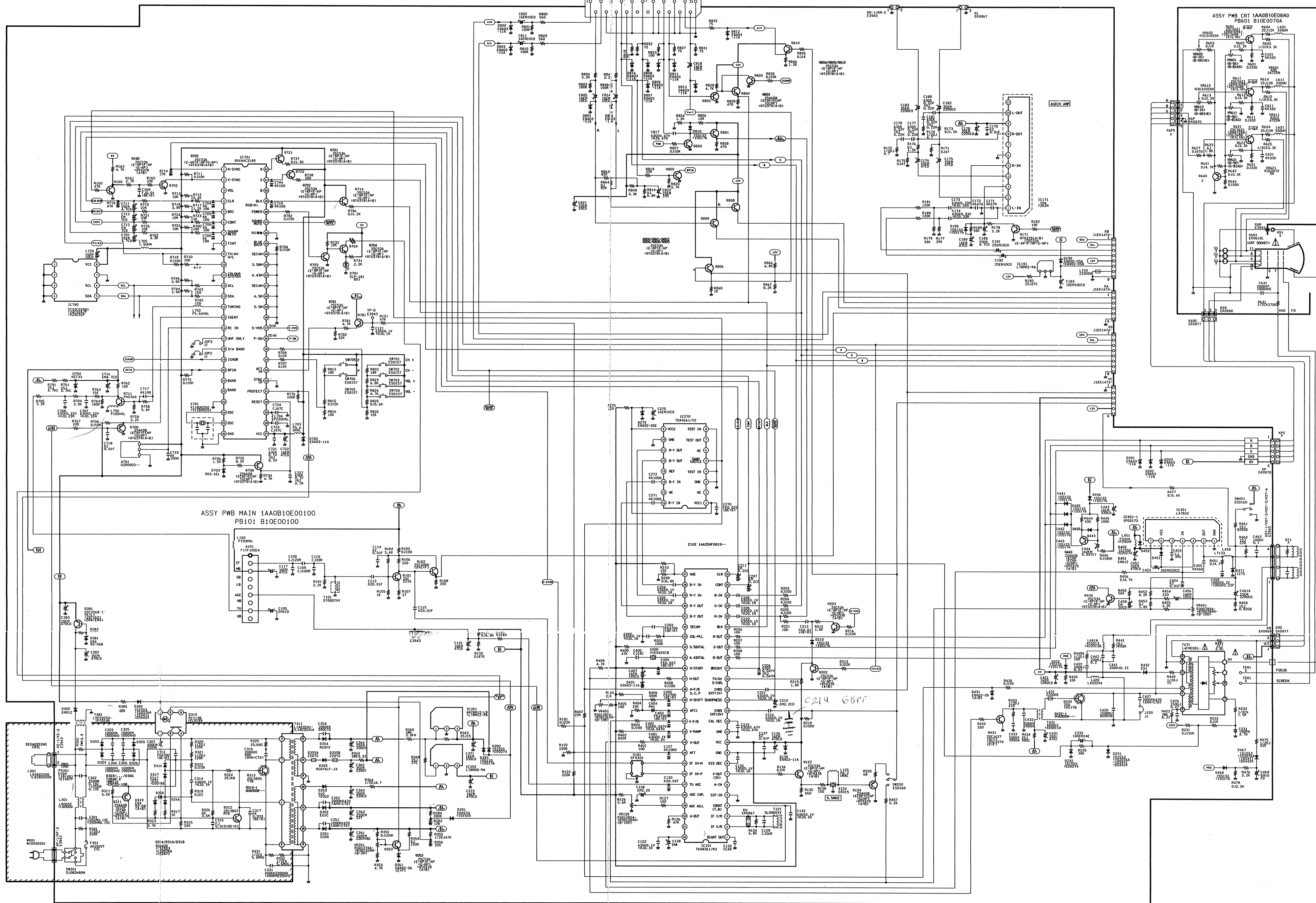
IC171	
VOLT.	WAVEFORM
B 1.7V	1.7V
C 1.7V	1.7V
E 1.7V	1.7V
B 1.7V	1.7V
C 1.7V	1.7V
E 1.7V	1.7V
B 1.7V	1.7V
C 1.7V	1.7V
E 1.7V	1.7V

Q410	
VOLT.	WAVEFORM
B -1.4V	6.6Vp-p
C -1.1V	5.0Vp-p
E 0V	

Q410	
VOLT.	WAVEFORM
B -1.1V	5.0Vp-p
C -	660Vp-p
E 0V	

Q431	
VOLT.	WAVEFORM
B 0.2V	1.0Vp-p HORIZ.
C 11.2V	60Vp-p HORIZ.
E 0V	

Q432	
VOLT.	WAVEFORM
B 0.1V	12Vp-p HORIZ.
C -	1100Vp-p HORIZ.
E 0V	



IC191	IC351	IC352	IC101	Q102	Q122	Q124	Q160	Q171	Q700	Q702	Q703	Q704	Q708	Q711	Q714	Q721	Q722
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
1 9.6V	1 14.5V	1 10.7V	1 12V	1 5.2V	1 3.1V	1 2.4V	1 0.4V	1 0V	1 8.0V	1 0.6V	1 0.6V	1 0.1V	1 4.4V	1 0.5V	1 0V	1 0V	1 0V
2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V	2 0V
3 5.0V	3 11.7V	3 8.0V	3 0.5V	3 4.7V	3 2.4V	3 3.1V	3 5.4V	3 12.9V	3 5.0V	3 0V	3 0.1V	3 29.0V	3 5.0V	3 5.3V	3 5.1V	3 5.1V	3 5.1V

Q202	Q203	Q311	Q353	Q381	Q434	Q443	Q781	Q800	Q801	Q802	Q803	Q804	Q805	Q806	Q808
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
1 0.6V	1 0V	1 9.5V	1 8V	1 5.7V	1 0V	1 7.7V	1 3.3V	1 0.1V	1 0.9V	1 0V	1 0V	1 0.6V	1 0V	1 6.4V	1 7.1V
2 0.1V	2 0V	2 -1.4V	2 -9.0V	2 15.7V	2 4.9V	2 0.7V	2 8.0V	2 0V	2 11.7V	2 0V	2 0V	2 11.7V	2 0.6V	2 11.7V	2 11.7V
3 0V	3 0V	3 9.9V	3 4.2V	3 5.1V	3 0V	3 7.8V	3 2.8V	3 0V	3 0.3V	3 0V	3 0.6V	3 0.1V	3 0V	3 5.7V	3 6.6V

Q809	Q810
VOLT.	VOLT.
1 7.1V	1 3.9V
2 11.7V	2 11.7V
3 6.6V	3 3.2V

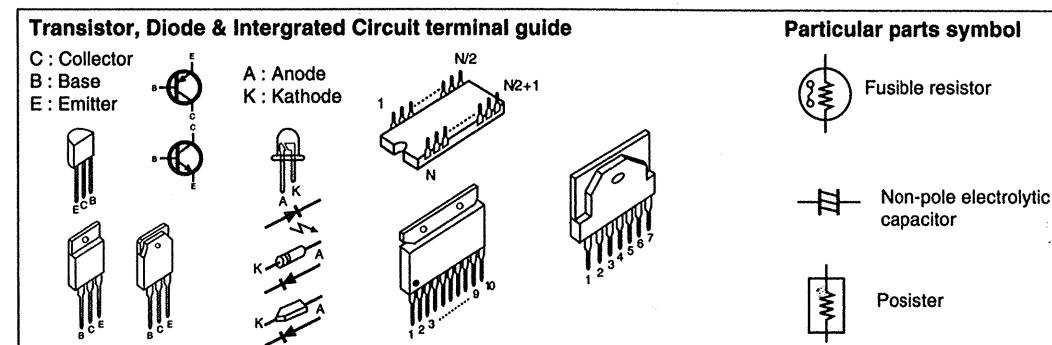
The service Precaution:
The area enclosed by this line () is directly connected with AC mains voltage. When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

Product safety notice:
Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a mark Δ in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

Circuit diagram notes:
1. All resistance values are in ohms, K=1,000, M=1,000,000.
2. All resistance rated wattages are 1/8W unless otherwise noted.
3. Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in pF and more than 1 are pF.
4. All capacitance rated voltages are 50V unless otherwise noted.
5. All inductance values are in μ H.
6. Voltage readings taken with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using a colour bar signal are with all controls at normal position. Some voltages may vary with signal strength.
7. Waveforms were taken with colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscilloscope and a low capacity probe.
8. This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.

9. Expression of capacitance and resistance in circuit diagram.
Capacitance (Example)
1000 C M 2000 D
Resistance (Example)
1/2 N 1.2
Characteristic Capacitance value (220pF)
Kind (Ceramic)
Rated voltage (1,000V)
Resistance value (1.2k)
Allowable error (45%)
Rated wattage (1/2W)

10. Diode 1S1555 may be replaced with 1S2473, 1S2076 or DS472 unless otherwise noted.
Transistor 2SC136(Q,R,S), 2SC174(Q,R,S), 2SC945A(Q,R,P) or 2SC1815(Q,O,Y) unless otherwise noted.
Transistor 2SA468(E,F) may be replaced with 2SA933(Q,R), 2SA564(QA,RA), or 2SA1015(O,Y) unless otherwise noted.

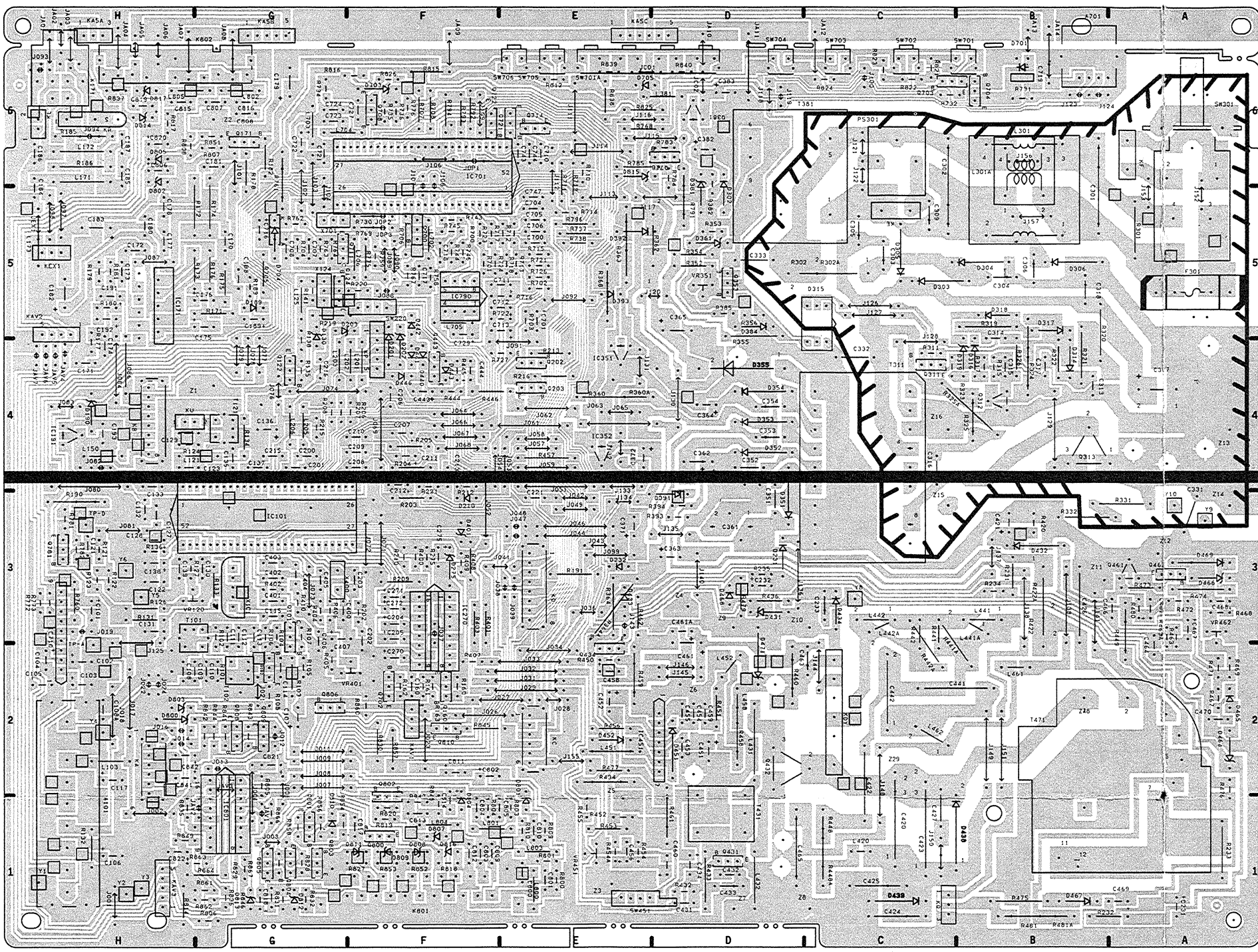


COLOUR TELEVISION

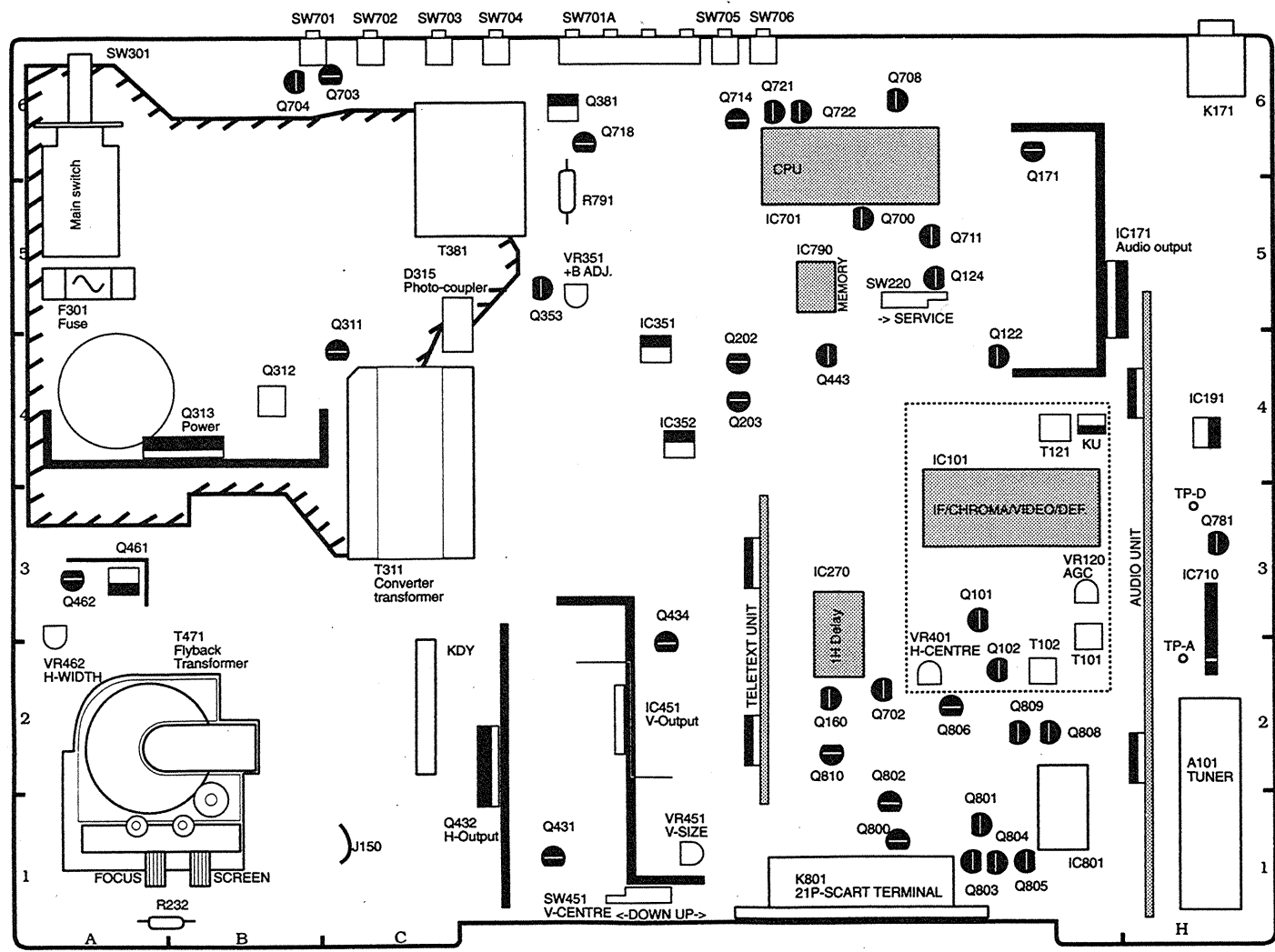
SANYO

EB2-A CHASSIS SERIES
CB5149
SERVICE REF.NO. **C21EF25NB-00**

Main board (Circuit side)

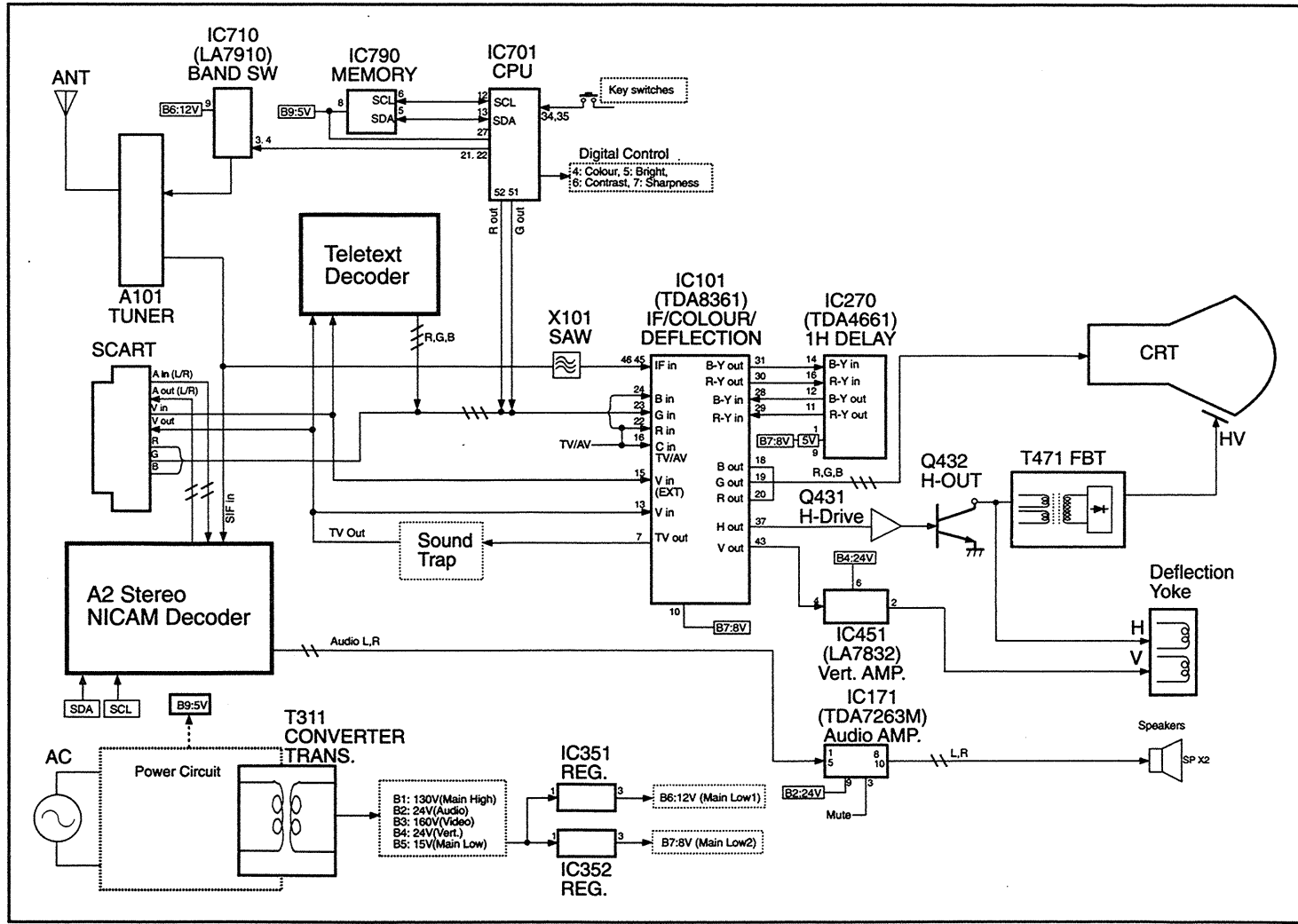


Main board (Component location)

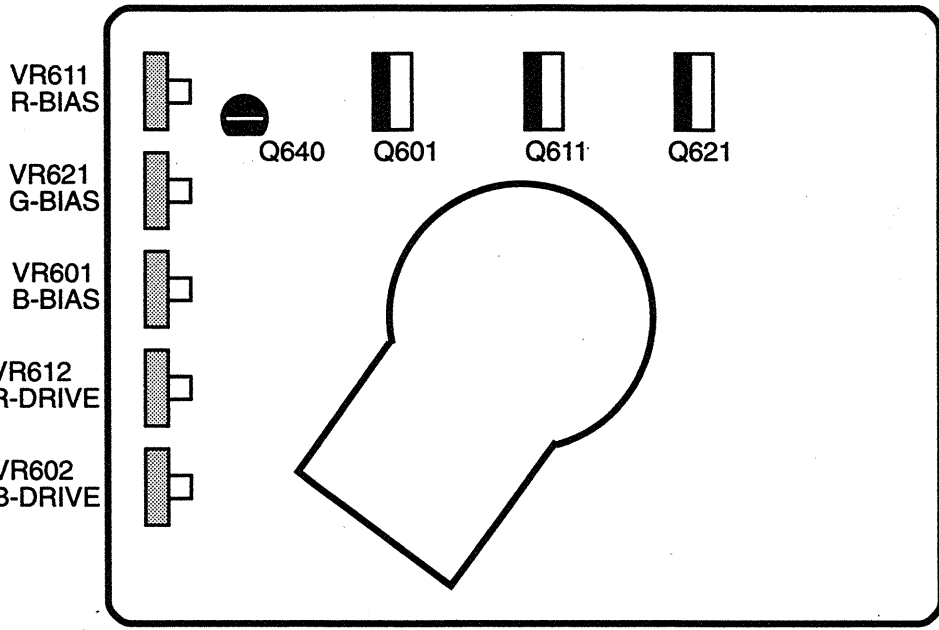


Block Diagram

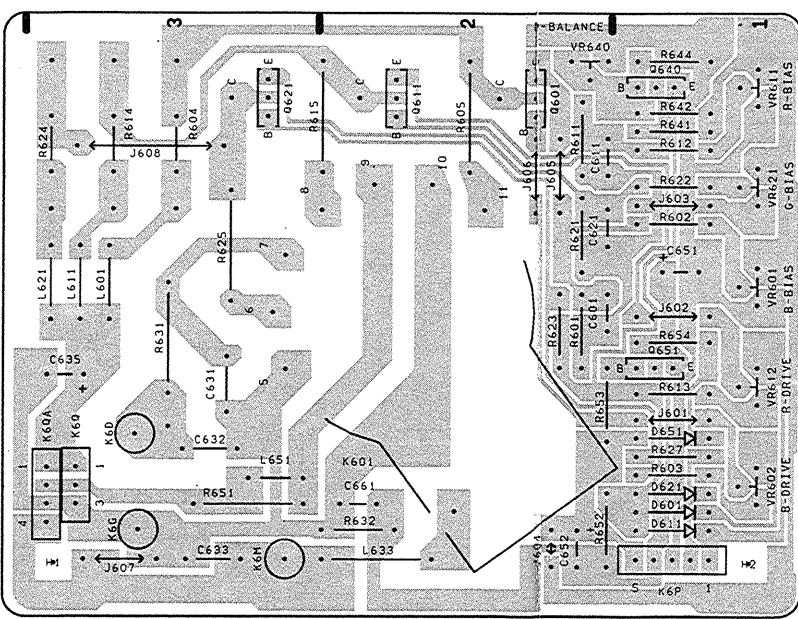
Note: This a general diagram covering all models



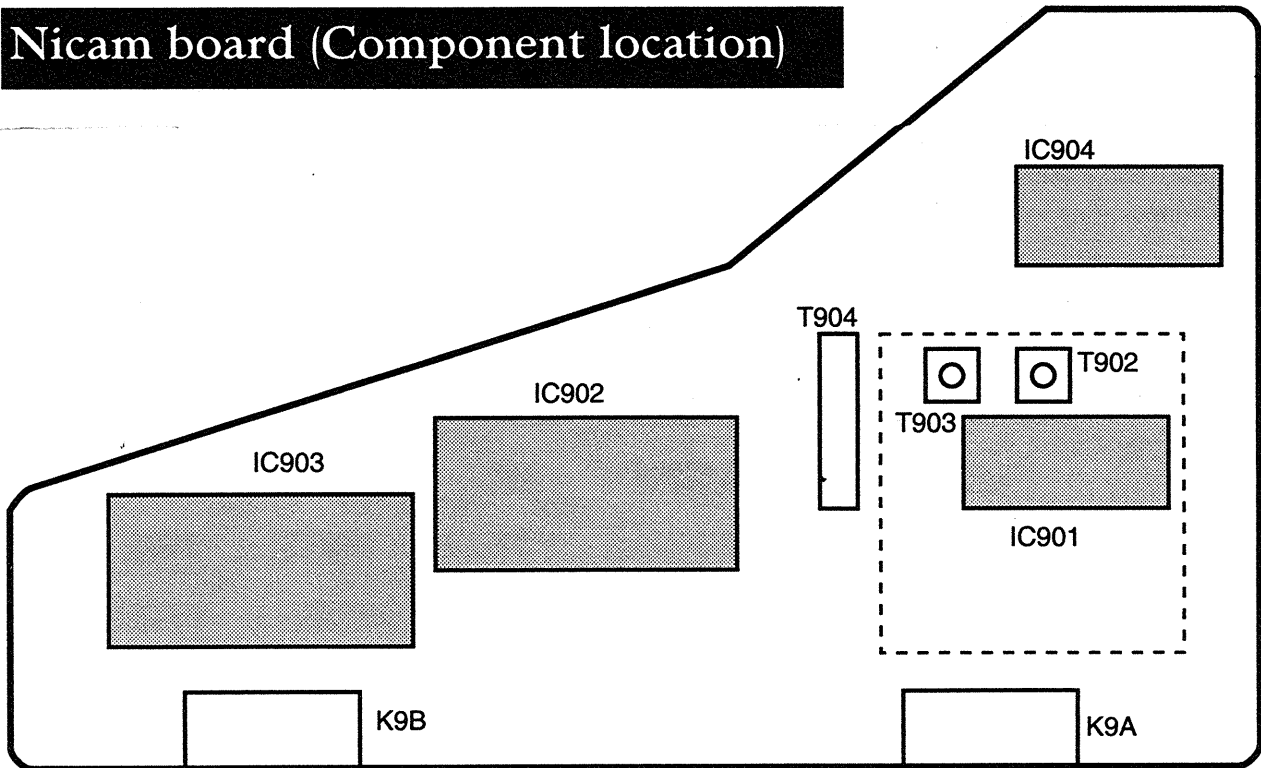
CRT board (Component location)



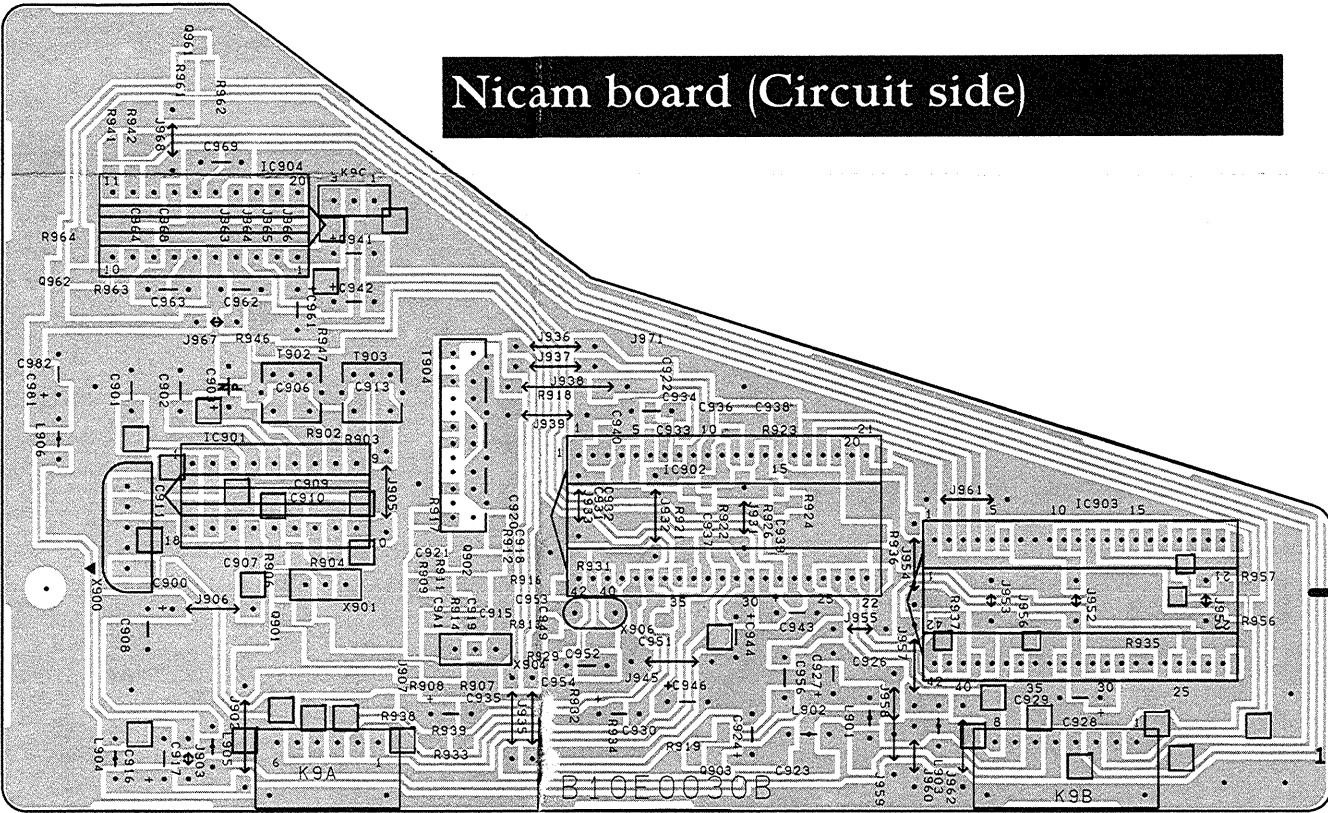
CRT board (Circuit side)



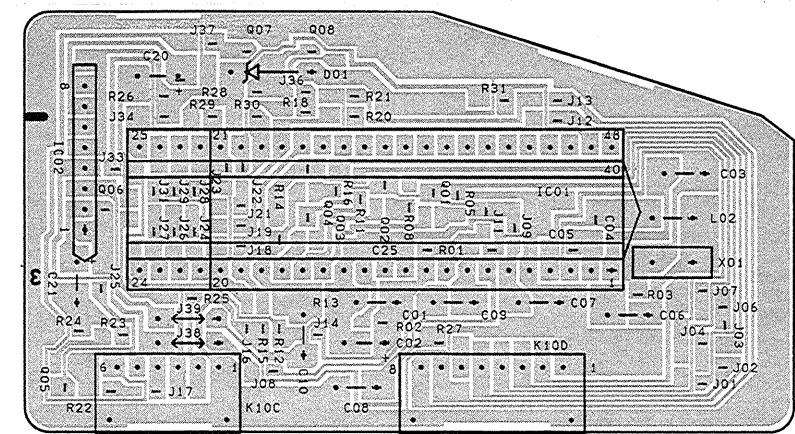
Nicam board (Component location)



Nicam board (Circuit side)



Teletext board (Circuit side)



AUDIO UNIT (NICAM)

IC901	IC902	IC903	IC904
4.4V 1	0V 1	0V 1	5.8V 1
2.1V 2	42 4.7V	42 4.7V	20 3.4V
5.6V 3	0.1V 2	0.1V 2	11.6V 2
0V 4	0.1V 3	2.5V 3	19 3.4V
2.4V 5	2.5V 4	0V 4	5.8V 3
3.0V 6	38 0.2V	4.9V 5	11.6V 4
2.4V 7	0V 6	37 0V	3.4V 5
3.1V 8	36 2.5V	4.9V 7	15 5.8V
3.1V 9	10.8V 8	4.9V 8	5.8V 6
5.3V 10	34 2.5V	4.9V 9	14 5.8V
	33 2.5V	4.9V 10	5.8V 7
	32 5.0V	0V 11	12 4.9V
	31 4.9V	4.8V 12	11 5.0V
	30 2.5V	4.9V 13	
	29 2.5V	4.9V 14	
	28 4.8V	2.3V 15	
	27 4.9V	2.5V 16	
	26 0V	4.9V 17	
	25 0.3V	4.9V 18	
	24 2.2V	4.9V 19	
	23 0V	4.9V 20	
	22 2.5V	4.9V 21	
		22 0V	

TELETEXT UNIT

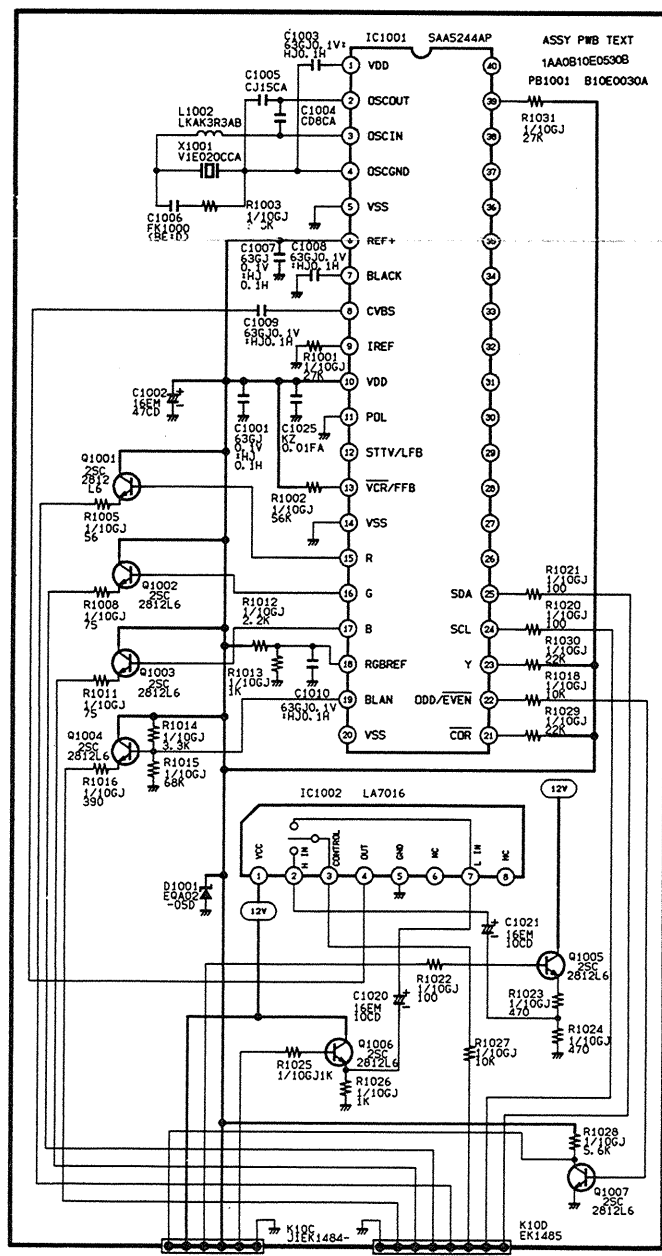
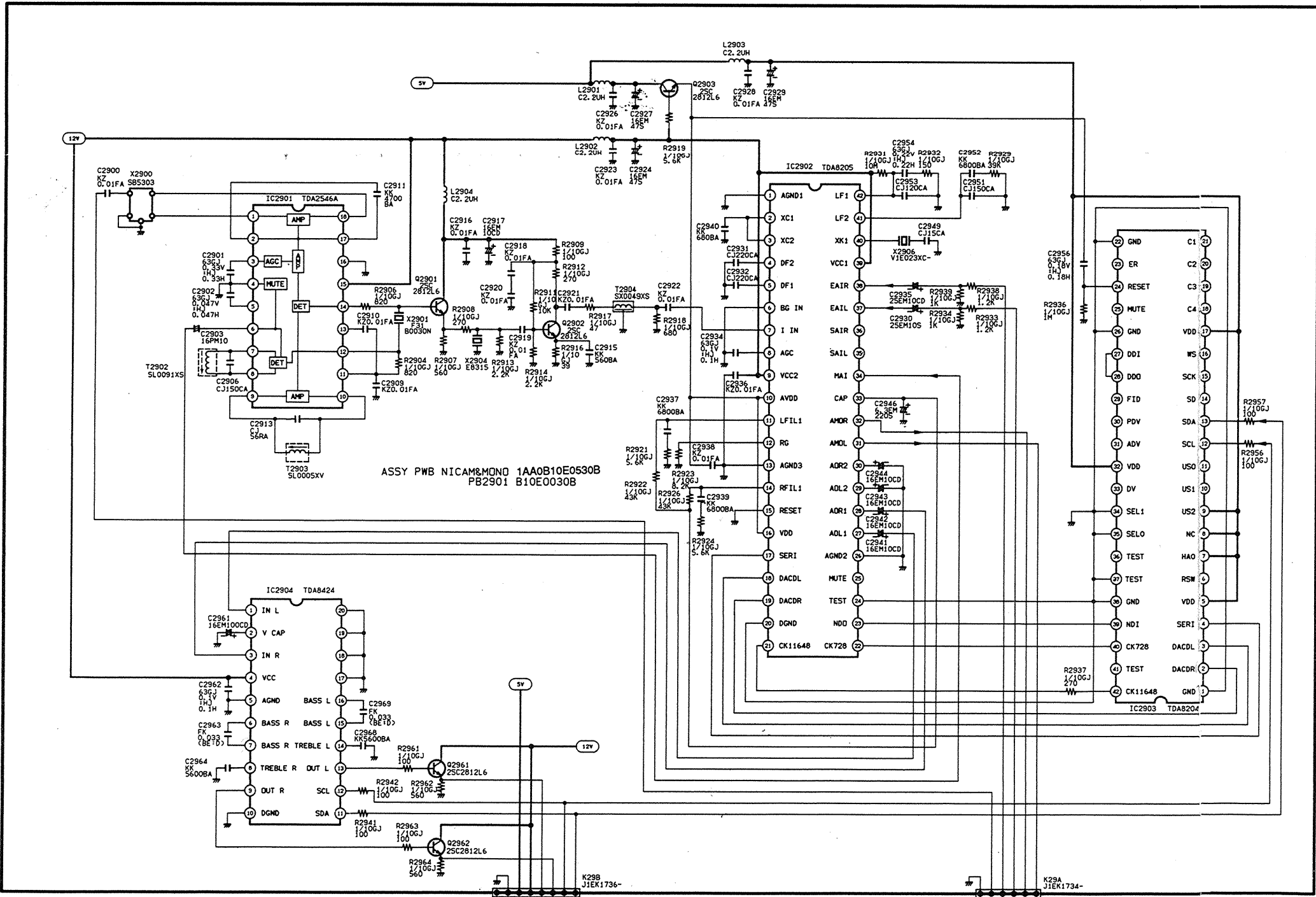
Q901	Q902	Q903	Q961	Q962
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
B 5.7V	B 1.5V	B 5.6V	B 5.8V	B 5.8V
C 11.6V	C 3.3V	C 4.9V	C 11.6V	C 11.6V
E 5.1V	E 1.0V	E 4.9V	E 5.2V	E 5.8V

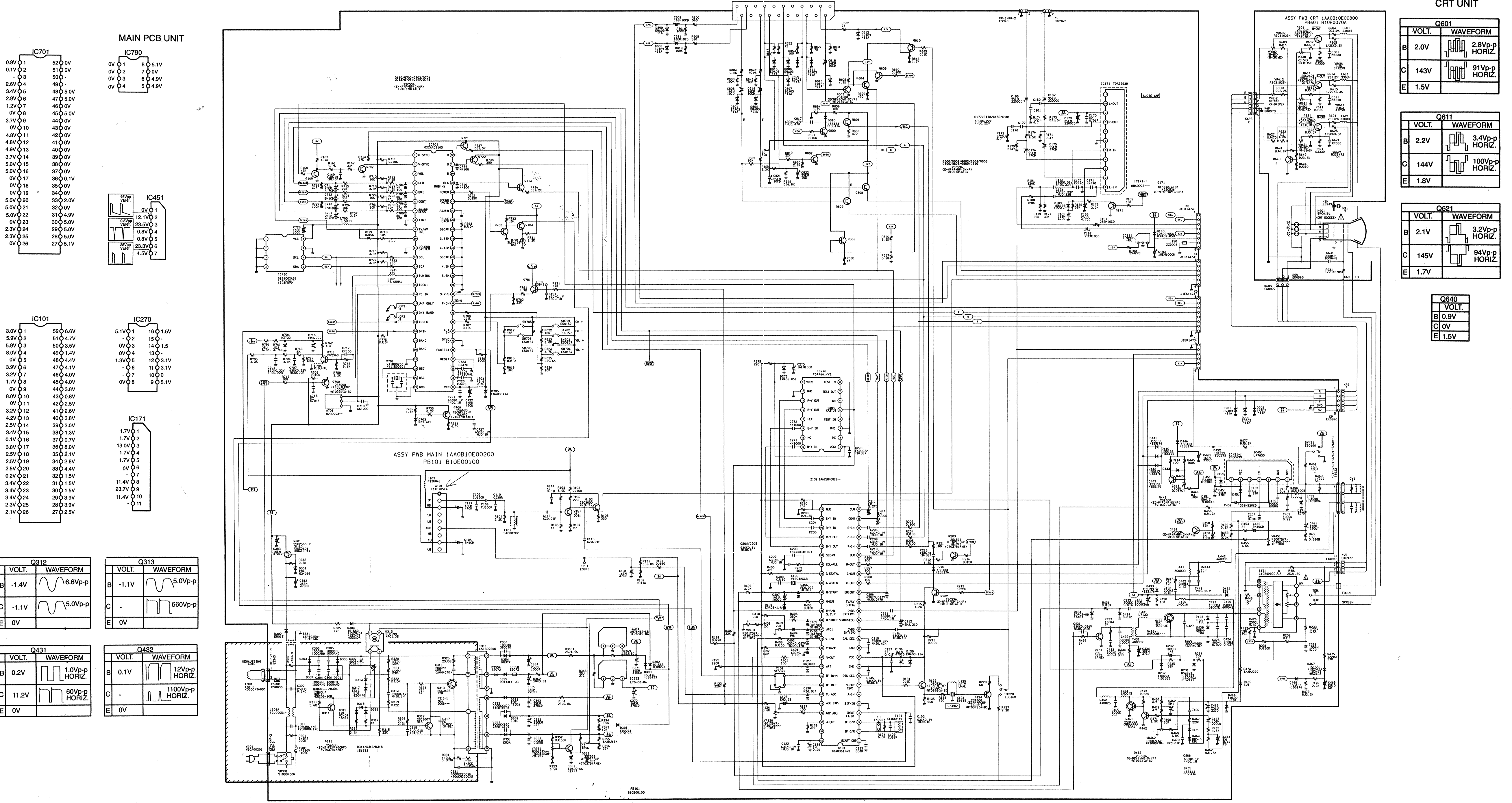
Q1001	Q1002	Q1003	Q1004
VOLT.	VOLT.	VOLT.	VOLT.
B 0V	B 0V	B 0V	B 0V
C 4.9V	C 4.9V	C 4.9V	C 4.9V
E 0V	E 0V	E 0V	E 0V

Q1005	Q1006	Q1007
VOLT.	VOLT.	VOLT.
B 3.9V	B 5.7V	B 0V
C 11.7V	C 11.7V	C 12.0V
E 3.2V	E 5.1V	E 0V

IC1001
4.7V 1
2.0V 2
3.6V 3
0V 4
37 5
36 6
35 7
4.9V 8
2.2V 9
2.5V 10
4.9V 11
0V 12
4.6V 13
0V 14
0V 15
0V 16
0V 17
0V 18
0V 19
0V 20

IC1002
11.6V 1
7.6V 2
3.6V 3
6.9V 4
0V 5
0V 6
7.6V 7
0V 8





Q312		Q313	
VOLT.	WAVEFORM	VOLT.	WAVEFORM
B -1.4V		B -1.1V	
C -1.1V		C -	
E 0V		E 0V	

Q431		Q432	
VOLT.	WAVEFORM	VOLT.	WAVEFORM
B 0.2V		B 0.1V	
C 11.2V		C -	
E 0V		E 0V	

IC191	IC351	IC352	Q101	Q102	Q122	Q124	Q160	Q171	Q700	Q702	Q703	Q704	Q708	Q711	Q714	Q721	Q722
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
1 9.6V	1 14.5V	1 10.7V	B 1.2V	B 5.2V	B 3.1V	B 2.4V	B 0.4V	B 0V	B 8.0V	B 0.6V	B 0.6V	B 0.1V	B 4.4V	B 0.5V	B 0V	B 0V	B 0V
2 0V	2 0V	2 0V	C 5.3V	C 9.1V	C 8.1V	C 12.9V	C 0V	C 12.9V	C 0V	C 0V	C 0.1V	C 29.0V	C 5.0V	C 5.3V	C 5.1V	C 5.1V	C 5.1V
3 5.0V	3 11.7V	3 8.0V	E 0.5V	E 4.7V	E 2.4V	E 3.1V	E 0V	E 0V	E 5.0V	E 0V	E 0V	E 1.8V	E 5.1V	E 0V	E 0.1V	E 0.3V	E 0V

Q202	Q203	Q311	Q353	Q381	Q434	Q443	Q461	Q462	Q781	Q800	Q801	Q802	Q803	Q804	Q805	Q806	Q808
VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.	VOLT.
B 0.6V	B 0V	B 9.6V	B 6.8V	B 5.7V	B 0V	B 7.7V	B 0.5V	B 9.7V	B 3.3V	B 0.1V	B 0.9V	B 0V	B 0V	B 0.6V	B 0V	B 6.4V	B 7.1V
C 0.1V	C 0V	C -1.4V	C 29.0V	C 15.7V	C 4.9V	C 9.1V	C 0V	C 0V	C 8.0V	C 0V	C 11.7V	C 5.1V	C 0V	C 11.7V	C 0.6V	C 11.7V	C 11.7V
E 0V	E 0V	E 9.9V	E 6.2V	E 5.1V	E 0V	E 7.8V	E 0V	E 9.1V	E 2.8V	E 0V	E 0.3V	E 0V	E 0.6V	E 0V	E 5.7V	E 6.6V	E 6.6V

The service precaution:
The area enclosed by this line () is directly connected with AC mains voltage. When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

COLOUR TELEVISION
EB2-A CHASSIS SERIES
CB5949
SERVICE REF.NO. **C21EG25NB-00**

Product safety notice:
Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a mark in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

- Circuit diagram notes :**
- All resistance values are in ohms; K=1,000, M=1,000,000.
 - All resistance rated wattages are 1/8W unless otherwise noted.
 - Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in pF and more than 1 are in μ F.
 - All capacitance rated voltages are 50V unless otherwise noted.
 - All inductance values are in μ H.
 - Voltage readings taken with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using a colour bar signal are with all controls at normal position. Some voltages may vary with signal strength.
 - Waveforms were taken by using a wide band oscilloscope and a low capacity probe.
 - This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.
- 9. Expression of capacitance and resistance in circuit diagram.**
- Capacitance (Example)**
1000 μ 2000 μ
- Resistance (Example)**
1/2 N 1.2
- Characteristic**
Capacitance value (220pF)
Allowable error ($\pm 20\%$)
Rated voltage (1,000V)
- Resistance value (1.2k)**
Allowable error ($\pm 5\%$)
Kind (M:carbon)
Rated wattage (1/2W)

- 10. Diode 1S1555 may be replaced with 1S2473, 1S2076 or DS472 unless otherwise noted.**
- Transistor 2SC396(Q,R,S), 2SC1740(Q,R,S), 2SC3945A(Q,R,P) or 2SC1815(Q,Y) unless otherwise noted.
Transistor 2SA608(E,F) may be replaced with 2SA933(Q,R), 2SA564(QA,RA), or 2A1015(O,Y) unless otherwise noted.

Transistor, Diode & Integrated Circuit terminal guide

C: Collector
B: Base
E: Emitter

A: Anode
K: Cathode

Particular parts symbol

Fusible resistor

Non-pole electrolytic capacitor

Posistor

